17620-3

REPORT

NMTBA
The Association For Manufacturing Technology

Direct Dial: (703) 827-5260

STATISTICS

No. 14-90 January 31, 1990

U.S. FOREIGN TRADE -- NOVEMBER 1989

U.S. FOREIGN TRADE IN MANUFACTURING TECHNOLOGY
(Millions of U.S. Dollars)

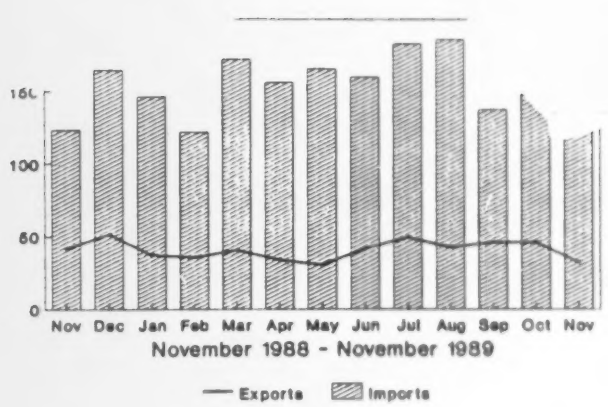
	Nov. 1989	Oct. 1989	% Change Oct.-Nov.	Year to Date '89	Year to Date '88	% Change '88-'89
METAL CUTTING MACHINE TOOLS						
Imports	$129.5	$147.5	(12.2%)	$1,704.0	$1,378.8	23.6%
Exports	$ 32.0	$ 46.0	(30.4%)	$ 435.7	$ 392.2	11.1%
Balance	($ 97.5)	($101.5)	(3.9%)	($1,268.3)	($ 986.6)	28.6%
METAL FORMING MACHINE TOOLS						
Imports	$ 41.4	$ 36.3	14.0%	$ 503.6	$ 463.5	8.7%
Exports	$ 36.3	$ 28.2	28.7%	$ 419.6	$ 286.0	46.7%
Balance	($ 5.1)	($ 8.1)	(37.0%)	($ 84.0)	($ 177.5)	(52.7%)
MACHINE TOOL TOTAL						
Imports	$171.0	$183.8	(7.0%)	$2,207.6	$1,842.3	19.8%
Exports	$ 68.3	$ 74.2	(8.0%)	$ 855.3	$ 678.2	26.1%
Balance	($102.7)	($109.6)	(6.3%)	($1,352.3)	($1,164.1)	16.2%
NUMERICALLY CONTROLLED MACHINE TOOLS						
Imports	$ 95.3	$104.8	(9.1%)	$1,189.6	NA	NA
Exports	$ 15.6	$ 26.8	(41.8%)	$ 225.5	NA	NA
Balance	($ 79.7)	($ 78.0)	2.2%	($ 964.1)	NA	NA
OTHER MANUFACTURING TECHNOLOGY						
Imports	$119.3	$111.5	7.0%	$1,303.3	NA	NA
Exports	$ 90.3	$101.1	(10.7%)	$1,088.2	NA	NA
Balance	($ 29.0)	($ 10.4)	178.8%	($ 215.1)	NA	NA

Note: Numerically controlled machine tools includes both metal cutting and metal forming machines, and is included in the respective totals. NA = not available; ( ) denotes negative; individual items may not add up to totals due to rounding.

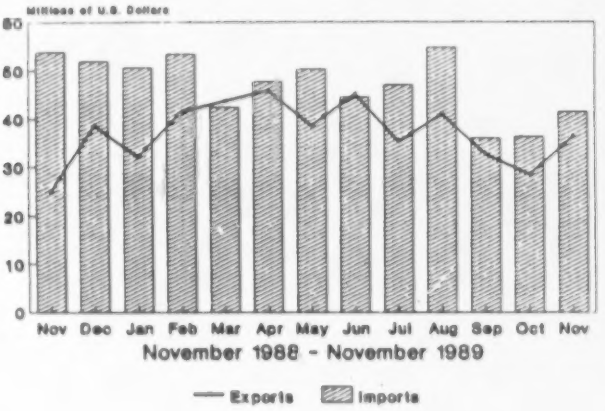
During November 1989 imports of machine tools fell 7% compared with October to $171.0 million, the lowest monthly import total since October 1988. Exports of machine tools fell 8% to $68.3 million, the lowest monthly export level since November 1988. Year-to-date machine tool exports are 26% higher compared with 1988; year-to-date machine tool imports are 20% higher this year than last. Monthly imports of NC machines fell 9% to $95.3 million, while exports of NC machines fell 42% to $15.6 million. The overall machine tool trade deficit in November was $102.7 million, down 6% from October.

7901 WESTPARK DRIVE, McLEAN, VIRGINIA 22102-4269 / PHONE (703) 893-2900 / TLX: 353819 / FAX (703) 893-1151

U.S. MONTHLY TRADE IN MACHINE TOOLS



METAL FORMING



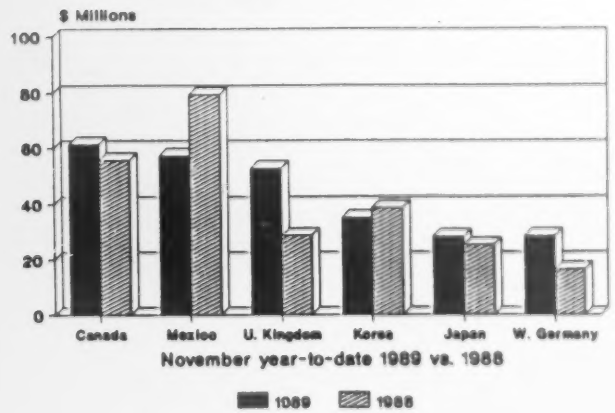
METAL CUTTING

Exports

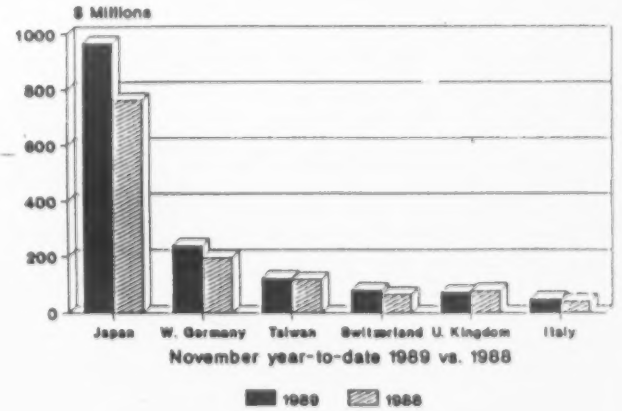
Exports of metal cutting machine tools fell 30% in November compared with October to $32.0 million, due largely to a drop in exports to the United Kingdom ($3.9 million in November from $11.8 million in October) and Mexico ($2.3 million in November from $5.6 million in October). Canada is the leading year-to-date U.S. export market for metal cutting machines at $61.4 million, up 10% over this time last year, followed by Mexico ($57.3 million, down 28%), the United Kingdom ($52.7 million, up 85%), and South Korea ($35.2 million, down 9%.) Exports in November of drilling machines ($0.6 million, down 76% from October) and milling machines ($0.3 million, down 90% from October) were the lowest monthly totals of 1989.

METAL CUTTING MACHINE TOOL FOREIGN TRADE

LEADING U.S. EXPORT MARKETS



LEADING U.S. IMPORT SOURCES



Imports

Metal cutting machine tool imports in November dropped 12% compared with October to $129.5 million, the lowest monthly total since February 1989. Imports from Japan in November were $64.6 million, the third consecutive monthly decline in imports from Japan and the lowest monthly total since October 1988. Imports from West Germany and Taiwan also fell more than 30% in November compared with October. Imports of machining centers fell 21% to $32.5 million; imports of grinding machines fell 22% to $15.0 million; and imports of gear cutting machines rose more than three-fold to $5.0 million compared with October. Year-to-date metal cutting machine tool imports are up 24% over last year; in the first 11 months of 1989 Japan supplied 57% ($966.4 million) of the $1.7 billion in U.S. metal cutting machine tool imports.

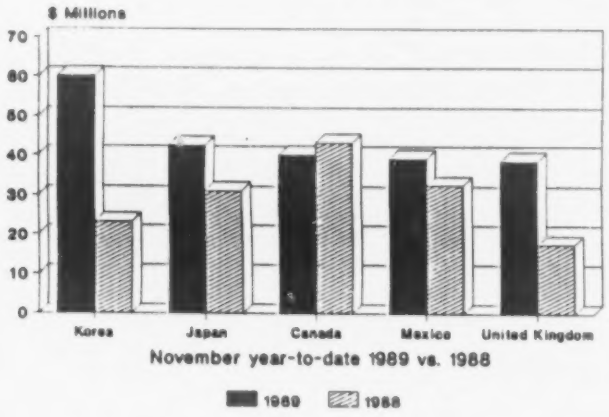
METAL FORMING

Exports

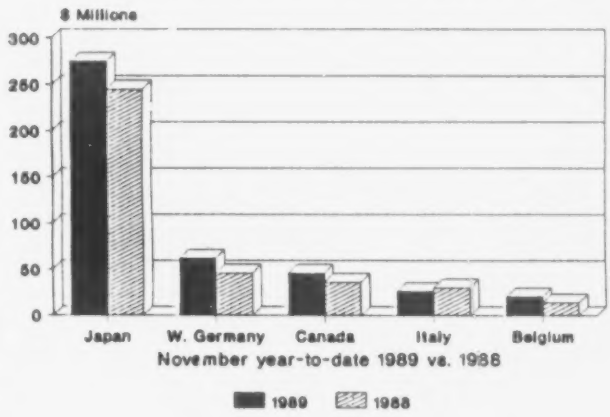
U.S. exports of metal forming machine tools jumped 29% from October to November to $36.3 million. Year-to-date exports of metal forming machines are 47% higher than last year. The largest metal forming export market in November was Korea at $7.8 million, up from $1.8 million in October, followed by West Germany and Mexico ($4.1 million each). Korea is far and away the leading U.S. export market for forming machines at $60.2 million through November. Exports in November of forging machines totalled $6.5 million, up 237% over October, while exports of "other metal forming machines" almost doubled to $12.8 million.

METAL FORMING MACHINE TOOL FOREIGN TRADE

LEADING U.S. EXPORT MARKETS



LEADING U.S. IMPORT SOURCES



Imports

Imports of metal forming machine tools rose 14% in November compared with October to $41.4 million, but was still the third lowest monthly total of the year. Imports from Japan jumped 76% from October to $21.9 million, including $6.3 million in forging machines and $3.1 million in die casting machines. Year-to-date metal forming imports of $503.6 million are 9% higher this year than last. Imports of both forging machines and bending and forming machines in November rose for the second month in a row; imports of presses fell slightly in November to $7.0 million. Japan is the largest year-to-date import source of metal forming machines ($274.6 million), followed by West Germany, Canada and Italy.

OTHER MANUFACTURING TECHNOLOGY

Exports

U.S. exports of other manufacturing technology fell 11% to $90.3 million from October to November. Exports of machine tool parts and accessories fell 7% to $58.9 million, and included exports of $8.0 million to Japan and the United Kingdom and $6.3 million to China. November exports of industrial robots and parts rose 7% to $4.1 million; exports of injection molding machinery rose 15% to $5.6 million. Japan was the leading U.S. export market during November at $11.1 million, followed by the United Kingdom ($11.1 million) and Canada ($10.0 million). Canada remains the year-to-date leader in U.S. exports of other manufacturing technology through November at $170.9 million, followed by the United Kingdom, Japan, Mexico, and West Germany.

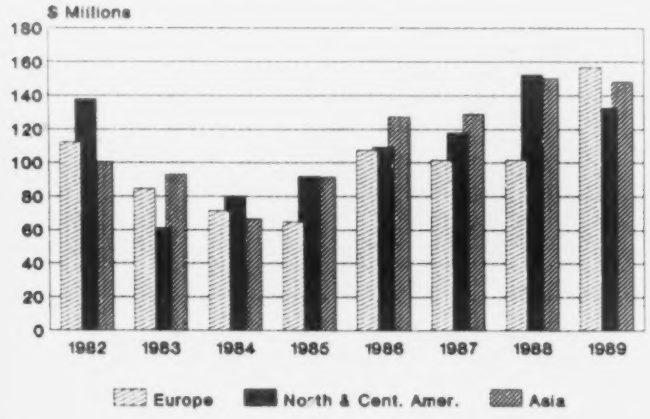
Imports

U.S. imports of other manufacturing technology rose 7% in November over October to $119.3 million. Imports of machine tool parts and accessories fell 17% compared with October to $40.8 million; imports of extruders rose 82% to $5.4 million. Imports of injection molding machinery rose 33% to $32.8 million, while imports of industrial robots and parts rose 6% to $24.1 million. Imports from Japan rose 7% in November to $57.2 million, including $13.1 million of injection molding machines and $16.6 million of industrial robots and parts. Imports from West Germany rose 23% in November to $24.1 million and included machine tool parts and accessories ($9.6 million) and injection molding machinery ($7.9 million).

MONTHLY FOCUS

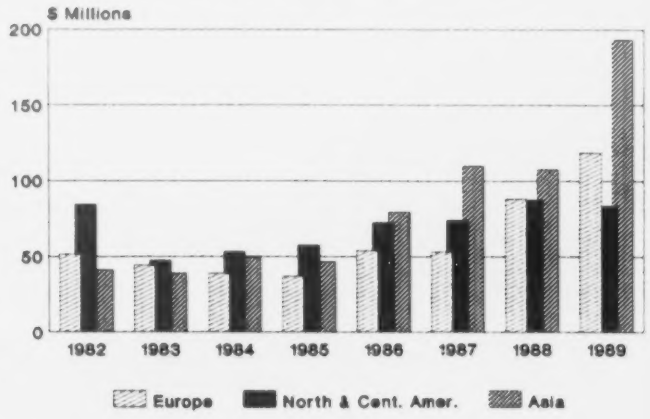
Asia is currently the leading U.S. export region, with U.S. machine tool exports of $313.1 million in 1989 through November. This figure already far exceeds last year's record export total of $257.5 million to the region. Exports to Europe totalled $261.4 million in 1989 through November, also a record. The charts below show U.S. metal cutting and metal forming machine tool exports to Asia, Europe, and North and Central America in recent years. Since 1986 Asia has been the top export market for metal forming machines, while the three regions have fluctuated as the top export market for metal cutting machines.

U.S. Metal Cutting Machine Tool Exports
By Regional Destination, 1980-1989



1989 data - Jan-Nov annualized

U.S. Metal Forming Machine Tool Exports
By Regional Destination, 1980-1989



1989 data - Jan-Nov annualized

1989 U.S. EXPORTS

BY PRODUCT GROUPS

PRODUCT TYPES	JANUARY		FEBRUARY		MARCH		APRIL	
	UNITS	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS	VALUE
Used & Rebuilt & Under $2,500	4,001	$ 9,651,663	3,732	$12,688,394	6,637	$13,092,251	5,141	$12,327,284
Boring Machines	74	638,181	26	2,545,592	18	3,222,763	17	950,038
Drilling Machines	18	895,459	17	696,798	15	1,308,988	27	1,314,012
Gear Cutting Machines	36	5,448,728	21	2,086,374	9	2,158,882	6	849,917
Grinding Machines	230	7,834,870	294	8,944,628	504	11,634,092	317	9,161,095
Horizontal Lathes NC	16	2,019,282	5	461,768	31	2,496,490	35	3,253,292
Vertical Lathes NC	2	366,000	0	0	2	112,569	0	0
Lathes Non-NC	16	465,926	56	1,275,656	59	1,492,297	43	1,613,647
Milling Machines	66	4,903,870	89	3,273,726	30	2,019,223	46	1,805,710
Machining Centers	21	3,086,413	22	5,831,777	14	1,491,145	28	3,534,392
Station Type Machines	4	1,498,740	5	2,392,333	9	3,248,541	5	929,962
Other Metal Cutting	257	4,584,770	265	2,822,073	210	5,030,489	161	4,263,085
Punching & Shearing	63	2,957,497	127	7,132,924	110	5,651,176	105	3,794,853
Bending & Forming Machines	84	3,433,140	104	3,074,999	94	4,555,647	107	4,294,467
Presses	133	5,590,097	115	5,951,499	119	5,662,008	116	6,281,018
Forging Machines	46	3,249,295	74	3,224,180	73	2,223,430	38	4,463,652
Other Metal Forming	322	12,540,612	266	14,907,382	527	18,723,205	467	20,849,780
TOTAL	5,389	$69,164,543	5,218	$77,310,103	8,461	$84,123,196	6,659	$79,686,204

PRODUCT TYPES	MAY		JUNE		JULY		AUGUST	
	UNITS	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS	VALUE
Used & Rebuilt & Under $2,500	4,512	$10,318,184	3,556	$17,348,522	4,243	$14,523,609	5,859	$10,954,511
Boring Machines	10	1,811,008	29	1,671,316	4	75,744	26	1,370,063
Drilling Machines	39	2,487,530	33	1,653,649	24	1,428,421	42	1,575,597
Gear Cutting Machines	17	1,579,602	22	4,722,265	55	5,208,745	18	3,423,837
Grinding Machines	227	5,612,584	321	12,488,637	392	19,501,133	349	12,629,954
Horizontal Lathes NC	13	1,205,227	26	3,018,171	13	1,512,085	12	1,014,932
Vertical Lathes NC	1	80,170	5	738,521	2	367,521	3	368,610
Lathes Non-NC	37	1,373,016	41	776,438	59	1,779,338	39	1,110,067
Milling Machines	35	2,375,933	37	1,408,096	74	4,101,114	39	1,503,000
Machining Centers	28	3,340,264	14	1,650,056	23	4,190,223	34	3,690,718
Station Type Machines	7	1,176,710	0	0	1	45,678	6	5,025,800
Other Metal Cutting	167	3,352,346	226	8,360,124	130	6,166,339	178	4,880,157
Punching & Shearing	74	5,837,129	120	4,665,277	105	4,248,102	118	6,391,378
Bending & Forming Machines	91	7,421,103	72	4,269,185	84	2,346,841	80	4,172,832
Presses	172	5,741,420	143	8,063,327	97	8,025,313	118	8,418,897
Forging Machines	63	3,165,982	74	4,247,697	49	2,299,970	77	2,971,894
Other Metal Forming	568	12,219,709	293	11,931,694	252	8,625,468	277	13,789,261
TOTAL	6,061	$69,097,917	5,012	$87,012,975	5,607	$84,445,644	7,275	$83,291,508

1989 U.S. EXPORTS

BY PRODUCT GROUPS

PRODUCT TYPES	SEPTEMBER UNITS	SEPTEMBER VALUE	OCTOBER UNITS	OCTOBER VALUE	NOVEMBER UNITS	NOVEMBER VALUE
Used & Rebuilt & Under $2,500	6,537	$10,153,000	4,883	$ 8,099,179	3,643	$ 9,099,729
Boring Machines	7	455,605	4	274,938	28	1,311,525
Drilling Machines	74	1,667,003	338	2,562,057	64	608,955
Gear Cutting Machines	8	2,758,714	16	5,122,064	48	4,982,715
Grinding Machines	234	10,589,426	465	12,020,573	242	5,773,319
Horizontal Lathes NC	32	5,329,579	29	3,070,304	20	2,041,092
Vertical Lathes NC	0	0	2	360,933	1	155,000
Lathes Non-NC	37	530,811	39	961,735	45	648,656
Milling Machines	30	1,466,905	42	3,215,606	11	334,380
Machining Centers	75	7,466,254	48	2,579,397	36	5,134,324
Station Type Machines	7	4,126,477	6	5,512,170	3	2,739,207
Other Metal Cutting	201	5,348,111	245	4,983,895	178	3,016,142
Punching & Shearing	122	4,957,288	54	2,888,326	141	3,752,463
Bending & Forming Machines	63	3,118,880	94	5,361,439	80	2,322,597
Presses	123	6,266,003	144	8,502,848	158	7,063,268
Forging Machines	109	3,380,224	52	1,933,851	110	6,521,456
Other Metal Forming	208	11,018,013	175	6,758,040	238	12,843,187
TOTAL	7,867	$78,632,293	6,636	$74,207,355	5,046	$68,348,015

1989 U.S. EXPORTS

BY PRODUCT GROUPS

PRODUCT TYPES	1ST QUARTER TOTALS UNITS	1ST QUARTER TOTALS VALUE	2ND QUARTER TOTALS UNITS	2ND QUARTER TOTALS VALUE	3RD QUARTER TOTALS UNITS	3RD QUARTER TOTALS VALUE	FIRST SIX MONTH TOTALS UNITS	FIRST SIX MONTH TOTALS VALUE
Used & Rebuilt & Under $2,500	14,370	$ 35,432,308	13,209	$ 39,993,990	16,639	$ 35,631,120	27,579	$ 75,426,298
Boring Machines	118	6,406,536	56	4,432,362	37	1,901,412	174	10,838,898
Drilling Machines	50	2,901,245	99	5,455,191	140	4,671,021	149	8,356,436
Gear Cutting Machines	66	9,693,984	45	7,151,784	81	11,391,296	111	16,845,768
Grinding Machines	1,028	28,413,590	865	27,262,316	975	42,720,513	1,893	55,675,906
Horizontal Lathes NC	52	4,977,540	74	7,476,690	57	7,856,596	126	12,454,230
Vertical Lathes NC	4	478,569	6	818,691	5	736,131	10	1,297,260
Lathes Non-NC	131	3,233,879	121	3,763,101	135	3,420,216	252	6,996,980
Milling Machines	185	10,196,819	118	5,589,739	143	7,071,019	303	15,786,558
Machining Centers	57	10,409,335	70	8,524,712	132	15,347,195	127	18,934,047
Station Type Machines	18	7,139,614	12	2,106,672	14	9,197,955	30	9,246,286
Other Metal Cutting	732	12,437,332	554	15,975,555	509	16,394,607	1,286	28,412,887
Punching & Shearing	300	15,741,597	299	14,297,259	345	15,596,768	599	30,038,856
Bending & Forming Machines	282	11,063,786	270	15,984,755	227	9,638,553	552	27,048,541
Presses	367	17,203,604	431	20,085,765	338	22,710,213	798	37,289,369
Forging Machines	193	8,696,905	175	11,877,331	235	8,652,088	368	20,574,236
Other Metal Forming	1,115	46,171,199	1,328	45,001,183	737	33,432,742	2,443	91,172,382
TOTAL	19,068	$230,597,842	17,732	$235,797,096	20,749	$246,369,445	36,800	$466,394,938

PRODUCT TYPES	NOVEMBER Y-T-D TOTALS UNITS	NOVEMBER Y-T-D TOTALS VALUE	% CHANGE 1ST-2ND QUARTER UNITS	% CHANGE 1ST-2ND QUARTER VALUE	% CHANGE 2ND-3RD QUARTER UNITS	% CHANGE 2ND-3RD QUARTER VALUE
Used & Rebuilt & Under $2,500	52,744	$128,256,326	-8.08%	12.87%	25.97%	-10.91%
Boring Machines	243	14,326,773	-52.54	-30.81	-33.93	-57.10
Drilling Machines	691	16,198,469	98.00	88.03	41.41	-14.37
Gear Cutting Machines	256	38,341,843	-31.82	-26.22	80.00	59.28
Grinding Machines	3,575	116,190,311	-15.86	-4.05	12.72	56.70
Horizontal Lathes NC	232	25,422,222	42.31	50.21	-22.97	5.08
Vertical Lathes NC	18	2,549,324	50.00	71.07	-16.67	-10.08
Lathes Non-NC	471	12,027,587	-7.63	16.36	11.57	-9.11
Milling Machines	499	26,407,563	-36.22	-45.18	21.19	26.50
Machining Centers	343	41,994,963	22.81	-18.11	88.57	80.03
Station Type Machines	53	26,695,618	-33.33	-70.49	16.67	336.61
Other Metal Cutting	2,218	52,807,531	-24.32	28.45	-8.12	2.62
Punching & Shearing	1,139	52,276,413	-0.33	-9.18	15.38	9.09
Bending & Forming Machines	953	44,371,130	-4.26	44.48	-15.93	-39.70
Presses	1,438	75,565,698	17.44	16.75	-21.58	13.07
Forging Machines	765	37,681,631	-9.33	36.57	34.29	-27.15
Other Metal Forming	3,593	144,206,351	19.10	-2.53	-44.50	-25.71
TOTAL	69,231	$855,319,753	-7.01	2.25	17.01	4.48

1989 U.S. IMPORTS

BY PRODUCT GROUPS

PRODUCT TYPES	JANUARY UNITS	JANUARY VALUE	FEBRUARY UNITS	FEBRUARY VALUE	MARCH UNITS	MARCH VALUE	APRIL UNITS	APRIL VALUE
Used & Rebuilt & Under $2,500	40,903	$ 10,113,655	28,520	$ 12,085,985	51,136	$ 12,059,838	53,299	12,791,125
Boring Machines	89	7,646,136	74	5,470,749	89	9,365,627	62	2,622,059
Drilling Machines	161	10,160,328	120	7,005,035	162	6,883,656	173	9,029,944
Gear Cutting Machines	46	4,358,306	23	2,222,717	67	1,681,440	24	1,627,946
Grinding Machines	560	13,559,864	606	14,282,507	620	29,083,045	718	27,286,695
Horizontal Lathes NC	366	33,687,505	321	27,833,919	364	35,957,086	296	26,315,649
Vertical Lathes NC	13	1,199,802	10	1,610,472	5	424,971	19	1,935,853
Lathes Non-NC	560	7,822,799	352	5,663,166	399	6,877,263	484	7,059,595
Milling Machines	410	9,722,408	316	8,491,551	435	17,093,177	604	9,709,582
Machining Centers	315	34,929,013	211	25,193,738	257	28,052,640	318	30,857,850
Station Type Machines	11	1,801,730	30	1,648,674	7	3,375,197	16	11,494,843
Other Metal Cutting	311	12,467,388	355	12,764,694	600	24,026,638	392	16,945,014
Punching & Shearing	161	7,053,551	153	5,222,761	113	6,861,975	128	4,809,075
Bending Forming Machines	183	8,366,797	194	7,673,335	199	5,639,375	181	9,461,859
Presses	239	11,386,574	189	25,984,776	154	17,014,014	111	9,382,988
Forging Machines	236	13,641,470	131	5,000,422	133	2,474,805	95	13,948,522
Other Metal Forming	129	8,724,784	939	7,345,113	1,089	7,539,827	471	8,290,431
TOTAL	44,693	$196,642,110	32,544	$175,499,614	55,829	$214,410,574	57,391	203,569,030

PRODUCT TYPES	MAY UNITS	MAY VALUE	JUNE UNITS	JUNE VALUE	JULY UNITS	JULY VALUE	AUGUST UNITS	AUGUST VALUE
Used & Rebuilt & Under $2,500	55,283	$ 15,897,111	69,060	$ 13,921,578	77,910	$ 13,718,883	74,032	$ 16,965,543
Boring Machines	56	2,914,892	72	2,527,722	81	7,293,496	75	3,376,302
Drilling Machines	198	8,206,249	152	4,725,223	104	5,203,287	248	9,230,435
Gear Cutting Machines	92	5,184,412	145	5,584,652	61	3,683,843	57	5,892,446
Grinding Machines	703	28,618,882	774	23,858,043	649	31,278,466	829	32,609,425
Horizontal Lathes NC	370	37,390,197	359	31,870,568	429	33,974,512	352	32,470,483
Vertical Lathes NC	21	3,192,456	13	2,027,113	11	5,265,883	16	1,717,600
Lathes Non-NC	406	7,181,037	444	11,364,045	503	7,584,504	540	6,924,904
Milling Machines	533	6,525,800	534	5,485,628	556	12,482,002	641	11,154,525
Machining Centers	293	31,263,982	326	40,246,641	335	38,239,581	396	40,355,378
Station Type Machines	19	4,417,149	19	4,361,363	26	10,264,530	32	9,664,860
Other Metal Cutting	450	16,125,897	423	15,836,967	442	15,809,995	504	16,912,954
Punching & Shearing	103	4,809,616	226	8,847,890	243	9,209,241	106	5,451,018
Bending Forming Machines	535	9,628,758	200	9,413,493	216	7,023,861	153	8,870,175
Presses	161	12,083,555	156	8,735,506	103	8,456,517	148	23,625,962
Forging Machines	155	9,299,745	105	5,532,553	189	9,336,801	94	4,160,854
Other Metal Forming	545	13,071,111	188	9,705,046	185	10,660,150	238	10,893,099
TOTAL	59,923	$215,810,849	73,196	$204,044,031	82,043	$229,485,552	78,461	$240,275,963

1989 U.S. IMPORTS

BY PRODUCT GROUPS

PRODUCT TYPES	SEPTEMBER UNITS	SEPTEMBER VALUE	OCTOBER UNITS	OCTOBER VALUE	NOVEMBER UNITS	NOVEMBER VALUE
Used & Rebuilt & Under $2,500	77,048	$ 15,144,015	95,522	$ 14,140,579	67,828	$ 11,942,281
Boring Machines	46	5,045,649	49	4,088,258	101	4,368,275
Drilling Machines	96	2,544,792	173	3,361,060	93	1,089,244
Gear Cutting Machines	16	3,220,313	74	1,105,796	54	4,985,161
Grinding Machines	656	18,270,938	638	19,102,185	638	14,980,807
Horizontal Lathes NC	366	33,946,089	337	30,842,516	294	26,258,734
Vertical Lathes NC	12	1,799,909	7	999,385	9	1,373,663
Lathes Non-NC	300	4,584,582	559	8,388,713	525	9,281,310
Milling Machines	448	6,954,433	612	11,233,029	615	7,793,252
Machining Centers	323	34,561,766	391	41,245,342	320	32,523,653
Station Type Machines	4	2,526,536	8	2,259,660	10	897,140
Other Metal Cutting	289	11,236,576	373	13,539,820	419	15,050,241
Punching & Shearing	112	6,143,562	178	5,569,235	113	6,516,958
Bending Forming Machines	154	4,509,033	168	6,669,577	183	8,839,591
Presses	134	5,006,807	205	7,367,625	118	6,992,355
Forging Machines	51	3,645,170	220	6,080,592	52	8,160,742
Other Metal Forming	134	13,896,994	1,322	7,845,154	354	9,939,309
TOTALS	80,189	$173,037,164	100,836	$183,838,526	71,726	$170,992,716

1989 U.S. IMPORTS

BY PRODUCT GROUPS

PRODUCT TYPES	1ST QUARTER TOTALS UNITS	1ST QUARTER TOTALS VALUE	2ND QUARTER TOTALS UNITS	2ND QUARTER TOTALS VALUE	3RD QUARTER TOTALS UNITS	3RD QUARTER TOTALS VALUE	FIRST SIX MONTH TOTALS UNITS	FIRST SIX MONTH TOTALS VALUE
Used & Rebuilt & Under $2,500	120,559	$ 34,259,478	177,642	$ 42,609,814	228,990	$ 45,828,441	298,201	$ 76,869,292
Boring Machines	252	22,482,512	190	8,064,673	202	15,715,447	442	30,547,185
Drilling Machines	443	24,049,019	523	21,961,416	448	16,978,514	966	46,010,435
Gear Cutting Machines	136	8,262,463	261	12,397,010	134	12,796,602	397	20,659,473
Grinding Machines	1,786	56,925,416	2,195	79,763,620	2,134	82,158,829	3,981	136,689,036
Horizontal Lathes NC	1,051	97,478,510	1,025	95,576,414	1,147	100,391,084	2,076	193,054,924
Vertical Lathes NC	28	3,235,245	53	7,155,422	39	8,783,392	81	10,390,667
Lathes Non-NC	1,311	20,363,228	1,334	25,604,677	1,343	19,093,990	2,645	45,967,905
Milling Machines	1,161	35,307,136	1,671	21,721,010	1,645	30,590,960	2,832	57,028,146
Machining Centers	783	88,175,391	937	102,368,473	1,054	113,156,725	1,720	190,543,864
Station Type Machines	48	6,825,601	54	20,273,355	62	22,455,926	102	27,098,956
Other Metal Cutting	1,266	49,258,720	1,265	48,907,878	1,235	43,959,525	2,531	98,166,598
Punching & Shearing	427	19,138,287	457	18,466,581	461	20,803,821	884	37,604,868
Bending Forming Machines	576	21,679,507	916	28,504,110	523	20,403,069	1,492	50,183,617
Presses	582	54,385,364	428	30,202,049	385	37,089,286	1,010	84,587,413
Forging Machines	500	21,116,697	355	28,780,820	334	17,142,825	855	49,897,517
Other Metal Forming	2,157	23,609,724	1,204	31,066,588	557	35,450,243	3,361	54,676,312
TOTALS	133,066	$586,552,298	190,510	$623,423,910	240,693	$642,798,679	323,576	$1,209,976,208

PRODUCT TYPES	NOVEMBER Y-T-D TOTALS UNITS	NOVEMBER Y-T-D TOTALS VALUE	% CHANGE 1ST-2ND QUARTER UNITS	% CHANGE 1ST-2ND QUARTER VALUE	% CHANGE 2ND-3RD QUARTER UNITS	% CHANGE 2ND-3RD QUARTER VALUE
Used & Rebuilt & Under $2,500	690,541	$ 148,780,593	47.35%	24.37%	28.91%	7.55%
Boring Machines	794	54,719,165	-24.60	-64.13	6.32	94.87
Drilling Machines	1,680	67,439,253	18.06	-8.68	-14.34	-22.69
Gear Cutting Machines	659	39,547,032	91.91	50.04	-48.66	3.22
Grinding Machines	7,391	252,930,857	22.90	40.12	-2.78	3.00
Horizontal Lathes NC	3,854	350,547,258	-2.47	-1.95	11.90	5.04
Vertical Lathes NC	136	21,547,107	89.29	121.17	-26.42	22.75
Lathes Non-NC	5,072	82,731,918	1.75	25.74	0.67	-25.43
Milling Machines	5,704	106,645,387	43.93	-38.48	-1.56	40.84
Machining Centers	3,485	377,469,584	19.67	16.10	12.49	10.54
Station Type Machines	182	52,711,682	12.50	197.02	14.81	10.77
Other Metal Cutting	4,558	170,716,184	-0.08	-0.71	-2.37	-10.12
Punching & Shearing	1,636	70,494,882	7.03	-3.51	0.88	12.66
Bending Forming Machines	2,366	86,095,854	59.03	31.48	-42.90	-28.42
Presses	1,718	136,036,679	-26.46	-44.47	-10.05	22.80
Forging Machines	1,461	81,281,676	-29.00	36.29	-5.92	-40.44
Other Metal Forming	5,594	107,911,018	-44.18	31.58	-53.74	14.11
TOTALS	736,831	$2,207,606,129	43.17	6.29	26.34	3.11

U.S. IMPORTS

Metal Cutting Machine Tools - November 89

RELEASED: January 31, 1990

		TOTAL YTD		TOTAL MO.	
		UNITS	$000	UNITS	$000
8456301010	Traveling wire electro-discharge machines, NC	651	54922	58	5553
301030	Traveling wire electro-discharge machines, non-NC	251	16321	20	922
301050	Electro-discharge machines, n.e.c., NC	148	9123	6	1072
301070	Electro-discharge machines, n.e.c., non-NC	347	12166	42	1201
8457100015	Vert. mach. ctrs., ATC, Y-axis travel not over 660mm(26")	2246	183425	231	19615
100025	Vert. mach. ctrs., ATC, Y-axis travel over 660mm(26")	205	28352	16	1552
100035	Horiz. mach. ctrs., ATC	754	124462	43	8248
100045	Mach. ctrs., n.e.c.	280	41230	30	3108
200010	Unit construction mach. (single station transfer), NC	28	4142	9	786
200090	Unit construction mach. (single station transfer), non-NC	15	777	0	0
300010	Multi-station transfer machines, NC	26	19994	0	0
300090	Multi-station transfer machines, non-NC	102	26972	1	111
8458110010	Horiz. lathes, multiple spindle, NC	340	48395	39	2719
110030	Horiz. lathes, power rating under 18.65 kW (25 HP), NC	2829	211114	187	14334
110050	Horiz. lathes, power rating 18.65-37.3 kW (25-50 HP), NC	602	78367	62	8264
110090	Horiz. lathes, power rating over 37.3 kW (50 HP), NC	83	12671	6	941
190030	Horiz. engine or toolroom lathes, non-NC	2792	26619	296	2573
190050	Automatic bar and/or chucking mach., single spindle, non-NC	450	11751	41	486
190070	Automatic bar and/or chucking mach., mult. spindle, non-NC	139	6090	52	727
190090	Horiz. lathes, n.e.c., non-NC	869	11623	41	496
911060	Vertical turret lathes, multiple spindle, NC	24	8592	1	189
911080	Vertical turret lathes, n.e.c., NC	42	5896	2	711
915050	Vertical lathes, excl. VTL's, mult. spindle, NC	2	682	0	0
915070	Vertical lathes, excl. VTL's, n.e.c., NC	68	6376	6	474
991050	Vertical turret lathes, non-NC	64	4543	7	1416
995090	Vertical lathes, n.e.c., excl. VTL's, non-NC	758	22106	88	3583
8459100000	Way-type unit head machines	11	827	0	0
270080	Other drilling machines, NC	505	33762	13	437
290040	Drilling machines, multiple spindle, non-NC	109	5629	2	15
290050	Drilling machines, radial, non-NC	410	2548	31	214
290070	Drilling, upright, ex. sensitive, turret & deep hole, non-NC	190	1507	3	39
290090	Drilling machines, n.e.c., non-NC	466	23994	44	385
310010	Boring-milling mach., horiz. spind., table, excl. planer, NC	15	3639	0	0
310040	Boring-milling mach., horiz. spindle, n.e.c., NC	210	15337	70	1004
310070	Boring-milling mach., n.e.c., NC	58	5706	4	2578
390040	Boring-milling mach., horiz. spindle, n.e.c., non-NC	39	1589	3	115
390050	Boring-milling macn., excl. horiz. spindle, n.e.c., non-NC	160	5796	4	291
400040	Boring machines, vertical, NC	17	6395	2	167
400050	Boring machines, vertical, non-NC	65	848	10	152
400070	Boring machines, n.e.c., NC	10	2459	0	0
400080	Boring machines, n.e.c., non-NC	220	12951	8	60
510080	Milling machines, knee type, NC	1050	15428	57	1515
590030	Milling machines, knee type, non-NC	3407	29421	430	2788
610080	Milling machines, excl. knee type, n.e.c., NC	480	41095	48	2207
690050	Milling machines, profile, dup., or die sinking, non-NC	105	850	24	109
690070	Milling machines, bed type, non-NC	94	2831	4	222
690090	Milling machines, n.e.c., non-NC	568	17020	52	952
700020	Threading or tapping machines, n.e.c., NC	266	13893	27	1169
700080	Threading or tapping machines, n.e.c., non-NC	275	8818	19	427
8460110080	Flat surface grinding mach., NC	151	11382	12	936
190010	Flat surface grinding mach., recip.-table type, non-NC	1021	11473	101	912
190050	Flat surface grinding mach., n.e.c., non-NC	1668	17937	161	1159
210080	Grinding mach., of an accuracy at least 0.01mm, n.e.c., NC	499	84518	29	4866
290010	Grinding mach., external cylindrical, (incl. univ.), non-NC	408	13624	84	1383
290030	Grinding mach., internal cylindrical, non-NC	139	12060	9	221
290050	Grinding mach., of accuracy at least 0.01mm, n.e.c., non-NC	1117	41616	61	1451
310080	Sharpening machines (tool & cutter grinding), NC	324	3831	15	252
390050	Sharpening machines (tool & cutter grinding), non-NC	638	8494	70	729
400060	Honing or lapping machines, NC	35	6889	3	666
400080	Honing or lapping machines, non-NC	167	5719	12	513
900060	Grinding, honing, polishing, & lapping mach., n.e.c., NC	48	4477	2	42
900080	Grinding, honing, polishing, & lapping mach., n.e.c., non-NC	1176	30908	79	1851
8461100060	Planing machines, NC	0	0	0	0
100080	Planing machines, non-NC	6	109	0	0
200010	Shaping or slotting machines, NC	32	3406	1	1024
200090	Shaping or slotting machines, non-NC	47	2505	1	42
300060	Broaching machines, NC	12	4425	0	0
300080	Broaching machines, non-NC	44	4344	1	323
401050	Gear hobbers	90	15470	0	0
401070	Gear shapers	13	2184	2	536
401090	Gear cutting machines, n.e.c.	391	1536	43	579
405060	Gear grinding or finishing machines	165	20357	9	3870
500050	Sawing or cutting-off machines, NC	145	3345	21	426
500090	Sawing or cutting-off machines, non-NC	1695	23072	148	2129
9000000001	Metal cutting machine tools, n.e.c.	639	14269	75	762
9800000001	Used or rebuilt machine tools	6381	37498	276	2815
9900000001	Machine tools valued at less than $2,500	661861	89520	65658	8129
	Cutting Total			69012	129545
	Y-T-D Cutting Total	701757	1704024		
	NC Y-T-D Cutting Total	12232	1100182		

Please see notes on last page of the metal forming section.

U.S. IMPORTS

Metal Cutting Machine Tools - November 89

	Belgium		Brazil		Canada		France		Italy	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456301010	0	0	0	0	0	0	0	0	0	0
301030	0	0	0	0	0	0	0	0	0	0
301050	0	0	0	0	0	0	0	0	0	0
301070	0	0	0	0	0	0	0	0	0	0
8457100015	0	0	0	0	0	0	4	469	0	0
100025	0	0	0	0	0	0	0	0	0	0
100035	0	0	0	0	0	0	0	0	0	0
100045	0	0	1	283	1	16	0	0	7	369
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300010	0	0	0	0	0	0	0	0	0	0
300090	0	0	0	0	0	0	0	0	0	0
8458110010	0	0	0	0	0	0	0	0	0	0
110030	0	0	0	0	0	0	0	0	0	0
110050	0	0	0	0	0	0	2	167	0	0
110090	0	0	0	0	0	0	0	0	0	0
190030	0	0	44	333	2	6	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
190070	0	0	0	0	0	0	0	0	0	0
190090	0	0	28	175	0	0	0	0	1	21
911060	0	0	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	0	0	0	0
915050	0	0	0	0	0	0	0	0	0	0
915070	0	0	0	0	0	0	0	0	1	83
991050	0	0	0	0	0	0	0	0	4	8
995090	0	0	19	92	2	15	0	0	0	0
8459100000	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	2	15
290050	0	0	5	49	1	3	0	0	4	47
290070	0	0	0	0	0	0	0	0	0	0
290090	3	29	0	0	0	0	0	0	0	0
310010	0	0	0	0	0	0	0	0	0	0
310040	0	0	0	0	0	0	0	0	14	542
310070	0	0	0	0	1	4	0	0	0	0
390040	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	1	217
400040	0	0	0	0	0	0	0	0	0	0
400050	0	0	0	0	0	0	0	0	9	143
400070	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	1	10	0	0	2	10
510080	0	0	0	0	0	0	0	0	0	0
590030	0	0	0	0	0	0	0	0	7	286
610080	0	0	0	0	0	0	0	0	2	223
690050	0	0	0	0	0	0	0	0	0	0
690070	0	0	0	0	0	0	0	0	0	0
690090	0	0	0	0	1	6	0	0	2	399
700020	0	0	0	0	0	0	0	0	1	3
700080	0	0	0	0	0	0	0	0	0	0
8460110080	0	0	3	47	0	0	1	29	0	0
190010	0	0	0	0	0	0	0	0	2	58
190050	0	0	0	0	3	27	0	0	16	134
210080	0	0	0	0	0	0	0	0	0	0
290010	0	0	0	0	24	102	0	0	8	144
290030	0	0	1	24	0	0	0	0	0	0
290050	0	0	0	0	1	199	0	0	0	0
310080	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	11	32	0	0	0	0
400060	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	0	0	0	0	0	0
900060	0	0	0	0	0	0	0	0	0	0
900080	0	0	2	6	2	78	0	0	16	726
8461100060	0	0	0	0	0	0	0	0	0	0
100080	0	0	0	0	0	0	0	0	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	0	0	0	0
401050	0	0	0	0	0	0	0	0	0	0
401070	0	0	0	0	0	0	0	0	0	0
401090	0	0	0	0	0	0	0	0	0	0
405060	2	311	0	0	0	0	0	0	3	39
500050	0	0	0	0	0	0	0	0	0	0
500090	0	0	0	0	43	681	3	74	35	123
9000000001	1	4	0	0	1	16	14	262	0	0
9800000001	1	4	0	0	132	118	2	13	0	0
9900000001	40	3	6	13	46	40	85	35	4518	746
Month Tot	47	351	109	1021	272	1354	111	1049	4655	4338
Y-T-D Tot	376	4863	968	6937	3479	18464	1489	19941	33459	47519
MC YTD Tot	11	383	40	1254	122	3819	55	3207	155	13893

Please see notes on last page of the metal forming section.

U.S. IMPORTS
Metal Cutting Machine Tools - November 89

	Japan		Korea		Singapore		Spain		Sweden	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456301010	51	4824	0	0	0	0	2	75	0	0
301030	4	239	0	0	0	0	0	0	0	0
301050	5	176	0	0	0	0	0	0	0	0
301070	0	0	0	0	0	0	11	154	0	0
8457100015	144	13629	1	71	24	1201	0	0	0	0
100025	16	1552	0	0	0	0	0	0	0	0
100035	37	7248	0	0	0	0	0	0	0	0
100045	1	149	4	222	1	51	0	0	0	0
200010	0	0	9	786	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300010	0	0	0	0	0	0	0	0	0	0
300090	0	0	0	0	0	0	0	0	0	0
8458110010	17	1825	0	0	0	0	0	0	0	0
110030	165	12926	9	612	0	0	0	0	0	0
110050	58	7902	0	0	0	0	0	0	0	0
110090	2	336	0	0	0	0	1	138	0	0
190030	2	89	10	97	29	318	17	125	0	0
190050	0	0	0	0	0	0	0	0	0	0
190070	0	0	0	0	0	0	0	0	0	0
190090	4	142	0	0	0	0	0	0	0	0
911060	1	189	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	0	0	1	290
915050	0	0	0	0	0	0	0	0	0	0
915070	0	0	3	305	0	0	0	0	0	0
991050	0	0	0	0	0	0	0	0	0	0
995090	14	1125	21	1203	0	0	0	0	0	0
8459100000	0	0	0	0	0	0	0	0	0	0
210080	7	324	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	1	32	0	0	0	0	0	0	0	0
290070	1	18	0	0	0	0	0	0	0	0
290090	14	150	0	0	0	0	18	52	1	6
310010	0	0	0	0	0	0	0	0	0	0
310040	40	136	0	0	0	0	0	0	0	0
310070	1	156	0	0	0	0	0	0	0	0
390040	0	0	0	0	0	0	0	0	0	0
390050	0	0	1	18	0	0	0	0	0	0
400040	2	167	0	0	0	0	0	0	0	0
400050	0	0	0	0	0	0	0	0	1	9
400070	0	0	0	0	0	0	0	0	0	0
400080	4	16	0	0	0	0	0	0	0	0
510080	0	0	0	0	0	0	17	94	1	4
590030	1	21	0	0	0	0	203	1288	1	28
610080	3	1148	0	0	0	0	3	10	0	0
690050	0	0	0	0	0	0	0	0	0	0
690070	3	153	0	0	0	0	1	69	0	0
690090	1	72	0	0	0	0	8	159	0	0
700020	26	1166	0	0	0	0	0	0	0	0
700080	12	284	0	0	0	0	0	0	0	0
8460110080	4	371	0	0	0	0	0	0	0	0
190010	26	250	0	0	37	325	0	0	0	0
190050	0	0	0	0	0	0	0	0	1	8
210080	16	2811	0	0	0	0	0	0	0	0
290010	2	191	0	0	0	0	0	0	1	409
290030	2	69	0	0	0	0	0	0	0	0
290050	9	318	0	0	0	0	0	0	0	0
310080	2	168	0	0	0	0	0	0	0	0
390050	7	71	0	0	0	0	0	0	1	6
400060	0	0	0	0	0	0	0	0	0	0
400080	5	477	0	0	0	0	0	0	0	0
900060	0	0	0	0	0	0	0	0	0	0
900080	4	348	15	101	0	0	1	122	1	8
8461100060	0	0	0	0	0	0	0	0	0	0
100080	0	0	0	0	0	0	0	0	0	0
200010	1	1024	0	0	0	0	0	0	0	0
200090	1	42	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	0	0	0	0
401050	0	0	0	0	0	0	0	0	0	0
401070	0	0	0	0	0	0	0	0	0	0
401090	0	0	0	0	0	0	0	0	0	0
405060	0	0	0	0	0	0	0	0	0	0
500050	13	311	0	0	0	0	0	0	0	0
500090	23	584	0	0	0	0	0	0	3	9
9000000001	16	246	0	0	0	0	0	0	0	0
9800000001	20	451	0	0	1	3	0	0	2	10
9900000001	4707	623	435	430	0	0	0	0	340	434
Month Tot	5495	64552	508	3844	92	1897	282	2380	354	1220
Y-T-D Tot	61020	966401	5930	25513	813	16188	2001	18077	2666	12099
NC YTD Tot	7788	818096	163	10456	182	9034	524	5506	12	2325

Please see notes on last page of the metal forming section.

U.S. IMPORTS

Metal Cutting Machine Tools - November 89

	Switzerland		Taiwan		U.K.		West Germany		All Other	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456301010	5	654	0	0	0	0	0	0	0	0
301030	6	614	10	69	0	0	0	0	0	0
301050	0	0	0	0	1	897	0	0	0	0
301070	6	578	15	271	2	5	3	103	5	91
8457100015	0	0	6	501	44	2461	5	1034	3	249
100025	0	0	0	0	0	0	0	0	0	0
100035	0	0	1	145	0	0	5	855	0	0
100045	1	1137	12	710	0	0	2	170	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300010	0	0	0	0	0	0	0	0	0	0
300090	1	111	0	0	0	0	0	0	0	0
8458110010	0	0	0	0	0	0	22	894	0	0
110030	0	0	12	736	0	0	0	0	1	60
110050	0	0	0	0	2	195	0	0	0	0
110090	0	0	0	0	0	0	3	468	0	0
190030	0	0	57	507	31	431	0	0	104	668
190050	1	95	40	392	0	0	0	0	0	0
190070	18	466	30	221	4	39	0	0	0	0
190090	0	0	0	0	7	123	0	0	1	35
911060	0	0	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	1	421	0	0
915050	0	0	0	0	0	0	0	0	0	0
915070	0	0	0	0	0	0	0	0	2	85
991050	3	1408	0	0	0	0	0	0	0	0
995090	1	6	0	0	1	37	1	776	29	329
8459100000	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	6	112	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	0	0	11	54	1	3	0	0	8	26
290070	0	0	0	0	0	0	2	21	0	0
290090	0	0	0	0	2	9	1	4	5	136
310010	0	0	0	0	0	0	0	0	0	0
310040	0	0	0	0	0	0	0	0	16	326
310070	0	0	0	0	2	2418	0	0	0	0
390040	0	0	0	0	0	0	1	10	2	106
390050	0	0	0	0	0	0	2	56	0	0
400040	0	0	0	0	0	0	0	0	0	0
400050	0	0	0	0	0	0	0	0	0	0
400070	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	1	24	0	0	0	0
510080	0	0	20	424	14	525	5	467	0	0
590030	0	0	122	692	40	161	0	0	56	312
610080	0	0	38	693	0	0	1	37	1	3
690050	0	0	24	109	0	0	0	0	0	0
690070	0	0	0	0	0	0	0	0	0	0
690090	2	47	9	40	5	147	2	13	22	67
700020	0	0	0	0	0	0	0	0	0	0
700080	0	0	0	0	0	0	6	138	1	5
8460110080	0	0	0	0	0	0	4	489	0	0
190010	0	0	12	55	0	0	14	198	10	26
190050	0	0	133	881	2	26	1	11	5	71
210080	3	405	0	0	1	19	9	1631	0	0
290010	2	198	0	0	6	119	3	81	38	141
290030	1	59	0	0	0	0	2	34	3	34
290050	5	205	3	26	2	18	27	537	14	147
310080	0	0	2	6	6	13	5	64	0	0
390050	15	171	10	58	15	120	11	270	0	0
400060	0	0	0	0	0	0	3	666	0	0
400080	0	0	0	0	4	12	2	16	1	8
900060	0	0	0	0	0	0	0	0	2	42
900080	1	52	0	0	18	102	17	284	2	25
8461100060	0	0	0	0	0	0	0	0	0	0
100080	0	0	0	0	0	0	0	0	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	1	323	0	0
401050	0	0	0	0	0	0	0	0	0	0
401070	0	0	0	0	0	0	2	536	0	0
401090	1	571	0	0	2	3	25	3	15	2
405060	2	1539	0	0	0	0	2	1980	0	0
500050	0	0	0	0	0	0	8	115	0	0
500090	2	50	0	0	13	115	11	348	15	145
9000000001	0	0	0	0	1	5	28	183	14	47
9800000001	3	28	4	51	74	878	32	1111	5	148
9900000001	23	22	40251	4518	167	95	310	278	14730	893
Month Tot	102	8417	40822	11158	468	9001	585	14737	15110	4225
Y-T-D Tot	1611	80382	445451	122617	6909	72339	10340	239363	125245	53320
NC YTD Tot	199	29152	1096	28609	670	36154	847	127314	368	10979

Please see notes on last page of the metal forming section.

U.S. IMPORTS
Metal Forming Machine Tools, Machine Tool Totals and Other Manufacturing Technology
November 89

RELEASED: January 31, 1990

Metal Forming Machine Tools		TOTAL YTD		TOTAL MO.	
		UNITS	$000	UNITS	$000
8454300010	Die casting machines	4080	41154	210	4673
8462100030	Headers and upsetters, including cold headers	134	11210	7	563
100050	Forging or die stamping machines, and hammers, n.e.c.	1327	70072	45	7598
210080	Bending, folding, straight. or flat. mach., incl presses, NC	936	33917	65	4283
290030	Press brakes, non-NC	351	9241	41	849
290040	Bending rolls, non-NC	75	1968	3	67
290050	Bending, folding, straight., or flat., n.e.c., non-NC	1004	40970	74	3640
310080	Shearing machines, NC	51	5953	6	724
390050	Shearing machines, non-NC	689	13367	42	633
410080	Punching or notching mach., incl. comb. punch & shear, NC	341	38412	28	4040
490050	Punching or notching mach., incl. comb. punch & sh., non-NC	555	12763	37	1120
910060	Hydraulic presses, NC	35	4968	5	1378
910090	Hydraulic presses, non-NC	544	22635	64	1295
990030	Presses, n.e.c., NC	92	6120	1	3
990040	Presses, mechanical, non-NC	66	23337	0	0
990060	Presses, n.e.c., non-NC	981	78977	48	4316
8463100080	Draw benches for bars, tubes, profiles, wire or the like	39	5009	0	0
200080	Thread rolling machines	59	2934	6	119
300080	Machines for working wire	657	31378	68	3212
900080	Metal forming machine tools, n.e.c.	759	27436	70	1936
9800000002	Used or rebuilt machine tools	893	15388	42	527
9900000002	Machine tools valued at less than $2,500	21406	6374	1852	471
	Forming Total			2714	41448
	Y-T-D Forming Total	35074	503582		
	NC Y-T-D Forming Total	1455	89370		
	Cutting and Forming Totals:				
	Monthly Total			71726	170993
	Y-T-D Total	736831	2207606		
	NC Y-T-D Total	13687	1189552		

Other Manufacturing Technology		TOTAL YTD		TOTAL MO.	
		UNITS	$000	UNITS	$000
1000000000	Machine tool parts and accessories	0	545620	0	40820
2710003070	Quenching or cutting oils	0	74	0	2
8428900010	Industrial robots for lifting, handling, loading or unload	1820	39600	153	2980
8456101010	Laser, light or photon beam for working metal, NC	108	15528	11	2146
101020	Laser, light or photon beam for working metal, non-NC	40	3952	2	407
105000	Laser, light or photon beam for other materials	2066	5027	305	537
201010	Ultrasonic processes for working metal, NC	6	952	0	0
201050	Ultrasonic processes for working metal, non-NC	12	29	0	0
205000	Ultrasonic processes for working other materials	143	634	4	2
8477106010	Injection molding mach., for rubber or oth. thermosetting	939	84422	118	8547
106050	Injection molding mach., for thermoplastics	2439	243627	212	24239
200010	Extruders for rubber or other thermosetting materials	201	21021	24	1916
200050	Extruders for processing thermoplastics	645	37406	47	3495
300000	Blow molding machines	264	38816	24	2683
400000	Vacuum-molding and other thermoforming machines	282	14875	31	184
8479899040	Industrial robots, n.e.c.	22829	126207	1018	15425
908040	Industrial robot parts	0	43731	0	5698
8537100030	Numerical controls for controlling machine tools	12705	48788	1380	5857
9024100000	Machines and appliances for testing metals	0	12528	0	1192
9031100000	Machines for balancing mechanical parts	0	10214	0	2038
300000	Profile projectors	0	4662	0	442
9032810020	Industrial process control instr., hydraulic	194732	2651	26065	336
810060	Industrial process control instr., pneumatic	117867	2901	19144	320

Note: Product code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466945000.
Note: "0" in units column with corresponding value means that unit measure is not meaningful.
n.e.c. - Not elsewhere classified.

U.S. IMPORTS
Metal Forming Machine Tools, Machine Tool Totals and Other Manufacturing Technology
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Metal Forming

	Belgium		Brazil		Canada		France		Italy	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	0	0	0	0	4	645	0	0	0	0
8462100030	0	0	0	0	0	0	0	0	1	177
100050	0	0	0	0	11	196	0	0	2	52
210080	0	0	0	0	3	503	0	0	16	1460
290030	0	0	0	0	16	500	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	28	595	0	0	10	174
310080	3	44	0	0	0	0	0	0	0	0
390050	3	53	0	0	2	48	0	0	6	50
410080	0	0	0	0	0	0	0	0	0	0
490050	0	0	0	0	6	425	0	0	0	0
910060	0	0	0	0	1	244	0	0	0	0
910090	0	0	4	2	7	147	0	0	2	22
990030	0	0	0	0	0	0	0	0	0	0
990040	0	0	0	0	0	0	0	0	0	0
990060	0	0	0	0	19	378	0	0	0	0
8463100080	0	0	0	0	0	0	0	0	0	0
200080	0	0	0	0	0	0	0	0	0	0
300080	9	392	0	0	2	8	2	44	11	989
900080	0	0	0	0	5	35	0	0	3	131
9800000002	1	43	0	0	14	24	1	25	5	33
9900000002	0	0	0	0	237	17	0	0	34	9
Month Tot	16	531	4	2	355	3764	3	69	90	3098
Y-T-D Tot	476	20057	254	4520	4339	45878	126	1551	1126	25849
NC YTD Tot	45	1588	0	0	24	1803	10	235	76	3742
C&F Month	63	882	113	1024	627	5118	114	1118	4745	7436
C&F Y-T-D	852	24920	1222	11457	7818	64343	1615	21492	34585	73368
C&F NC YTD	56	1971	40	1254	146	5622	65	3442	231	17634

Other Manufacturing Technology

1000000000	0	259	0	26	0	1550	0	284	0	738
2710003070	0	0	0	0	0	0	0	0	0	0
8428900010	0	0	0	0	13	277	1	850	0	0
8456101010	0	0	0	0	0	0	0	0	0	0
101020	0	0	0	0	0	0	0	0	0	0
105000	0	0	0	0	0	0	0	0	0	0
201010	0	0	0	0	0	0	0	0	0	0
201050	0	0	0	0	0	0	0	0	0	0
205000	0	0	0	0	0	0	0	0	0	0
8477106010	0	0	0	0	2	343	7	1084	18	538
106050	0	0	0	0	35	3733	0	0	23	1878
200010	0	0	0	0	0	0	1	57	0	0
200050	0	0	0	0	8	199	3	65	2	149
300000	0	0	0	0	0	0	1	561	0	0
400000	0	0	0	0	3	106	1	2	1	40
8479899040	0	0	0	0	5	91	2	308	1	376
908040	0	0	0	0	0	30	0	9	0	7
8537100030	0	0	0	0	8	3	0	0	0	0
9024100000	0	0	0	0	0	103	0	7	0	76
9031100000	0	0	0	0	0	5	0	0	0	0
300000	0	0	0	0	0	0	0	0	0	0
9032810020	0	0	0	0	0	0	0	0	0	0
810060	0	0	0	0	0	0	0	0	5152	17

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466945000.
Note: "0" in units column with corresponding value means that unit measure is not meaningful.

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Metal Forming

	Japan		Korea		Singapore		Spain		Sweden	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	202	3103	0	0	0	0	0	0	0	0
8462100030	5	251	0	0	0	0	0	0	0	0
100050	13	6013	5	65	0	0	0	0	0	0
210080	39	1623	0	0	0	0	1	21	2	250
290030	11	220	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	5	95	0	0	0	0	1	11	7	1684
31008C	1	167	0	0	0	0	0	0	0	0
390050	8	352	0	0	6	43	0	0	2	17
410080	18	3002	0	0	0	0	0	0	0	0
490050	3	228	0	0	0	0	22	218	1	24
910060	1	71	0	0	0	0	0	0	1	497
910090	24	811	0	0	0	0	0	0	3	3
990030	0	0	0	0	0	0	0	0	0	0
990040	0	0	0	0	0	0	0	0	0	0
990060	16	3686	0	0	0	0	0	0	0	0
8463100080	0	0	0	0	0	0	0	0	0	0
200080	0	0	0	0	0	0	5	104	0	0
300080	37	1177	0	0	0	0	0	0	0	0
900080	41	937	0	0	0	0	0	0	0	0
9800000002	6	178	0	0	0	0	0	0	0	0
9900000002	102	21	0	0	0	0	0	0	7	4
Month Tot	532	21935	5	65	6	43	29	353	23	2479
Y-T-D Tot	5189	274603	75	394	68	862	584	2769	400	9498
NC YTD Tot	897	48872	0	0	0	0	2	71	9	1238
C&F Month	6027	86487	513	3909	98	1940	311	2733	377	3699
C&F Y-T-D	66209	1241005	6005	25907	881	17051	2585	20846	3066	21597
C&F NC YTD	8685	866968	163	10456	182	9034	526	5577	21	3563

Other Manufacturing Technology

1000000000	0	15563	0	177	0	640	0	290	0	613
2710003070	0	0	0	0	0	0	0	0	0	0
8428900010	48	807	0	0	0	0	0	0	3	157
8456101010	9	1995	0	0	0	0	0	0	0	0
101020	0	0	0	0	0	0	0	0	0	0
105000	65	27	0	0	0	0	0	0	0	0
201010	0	0	0	0	0	0	0	0	0	0
201050	0	0	0	0	0	0	0	0	0	0
205000	0	0	0	0	0	0	0	0	0	0
8477106010	42	2906	2	129	0	0	0	0	0	0
106050	48	10181	19	429	0	0	0	0	0	0
200010	12	1086	0	0	0	0	1	4	0	0
200050	1	8	0	0	0	0	0	0	0	0
300000	4	688	0	0	0	0	0	0	0	0
400000	1	4	0	0	0	0	0	0	0	0
8479899040	392	12534	0	0	0	0	0	0	17	806
908040	0	3246	0	0	0	0	0	0	0	90
8537100030	1229	5775	0	0	0	0	0	0	0	0
9024100000	0	203	0	0	0	0	0	0	0	9
9031100000	0	1832	0	0	0	12	0	0	0	0
300000	0	138	0	0	0	0	0	0	0	0
9032810020	60	167	4820	18	0	0	0	0	0	0
810060	0	0	0	0	0	0	0	0	1074	201

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466945000.
Note: "0" in units column with corresponding value means that unit measure is not meaningful.

U.S. IMPORTS
Metal Forming Machine Tools, Machine Tool Totals and Other Manufacturing Technology
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Metal Forming

	Switzerland		Taiwan		U.K.		West Germany		All Other	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	3	699	0	0	0	0	1	225	0	0
8462100030	0	0	0	0	0	0	1	134	0	0
100050	2	24	0	0	7	1005	1	133	4	110
210080	0	0	0	0	1	87	2	312	1	27
290030	0	0	0	0	0	0	2	8	12	121
290040	0	0	0	0	0	0	0	0	3	67
290050	3	745	6	47	1	159	2	60	11	72
310080	0	0	0	0	0	0	2	513	0	0
390050	0	0	7	23	6	29	1	7	1	12
410080	1	37	1	23	0	0	8	978	0	0
490050	0	0	0	0	0	0	4	223	1	3
910060	0	0	1	458	0	0	1	108	0	0
910090	0	0	2	3	2	5	7	247	13	54
990030	0	0	0	0	0	0	0	0	1	3
990040	0	0	0	0	0	0	0	0	0	0
990060	0	0	1	23	0	0	6	153	6	77
8463100080	0	0	0	0	0	0	0	0	0	0
200080	0	0	1	15	0	0	0	0	0	0
300080	0	0	0	0	0	0	3	462	4	140
900080	1	533	3	29	11	61	5	202	1	7
9800000002	2	4	0	0	7	202	4	7	2	12
9900000002	15	4	690	259	8	2	89	39	670	118
Month Tot	27	2047	712	878	43	1549	139	3811	730	824
Y-T-D Tot	1648	16274	9441	8224	993	14045	1567	62051	8788	17008
NC YTD Tot	32	4669	25	1046	10	568	240	20227	85	5310
C&F Month	129	10463	41534	12037	511	10550	724	18548	15840	5049
C&F Y-T-D	3259	96656	454892	130840	7902	86384	11907	301413	134033	70328
C&F NC YTD	231	33821	1121	29655	680	36723	1087	147541	453	16289

Other Manufacturing Technology

1000000000	0	2665	0	2695	0	2948	0	9638	0	2736
2710003070	0	0	0	0	0	0	0	2	0	0
8428900010	0	0	60	41	9	399	16	209	3	240
8456101010	0	0	0	0	0	0	0	0	2	151
101020	0	0	0	0	1	300	0	0	1	107
105000	1	3	0	0	2	14	230	6	7	487
201010	0	0	0	0	0	0	0	0	0	0
201050	0	0	0	0	0	0	0	0	0	0
205000	4	2	0	0	0	0	0	0	0	0
8477106010	2	66	5	230	1	12	28	2850	11	388
106050	11	1392	18	1015	1	4	45	5034	12	572
200010	1	100	0	0	3	356	2	194	4	118
200050	1	348	4	278	7	59	20	2372	1	18
300000	0	0	1	31	0	0	18	1403	0	0
400000	0	0	0	0	0	0	25	33	0	0
8479899040	0	0	0	0	7	55	504	899	90	357
908040	0	89	0	1	0	174	0	873	0	1179
8537100030	3	4	0	0	0	0	136	30	4	45
9024100000	0	288	0	0	0	193	0	241	0	73
9031100000	0	0	0	0	0	7	0	46	0	137
300000	0	0	0	0	0	16	0	182	0	106
9032810020	575	11	0	0	1150	8	4	33	19456	98
810060	0	0	1270	24	0	0	11642	74	6	3

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466945000.
Note: "0" in units column with corresponding value means that unit measure is not meaningful.

U.S. IMPORTS
Metal Cutting and Metal Forming Machine Tool Totals
November 89

	METAL CUTTING		METAL FORMING		TOTAL	
	UNITS	$000	UNITS	$000	UNITS	$000
EUROPE						
Austria	155	736	3	29	158	765
Bulgaria	0	0	0	0	0	0
Czechoslovakia	6	90	0	0	6	90
Denmark	17	64	5	71	22	135
East Germany	141	40	0	0	141	40
Finland	1	99	13	146	14	245
Hungary	15	2	0	0	15	2
Ireland	0	0	0	0	0	0
Luxembourg	0	0	0	0	0	0
Netherlands	13	103	11	8	24	111
Norway	1	6	2	5	3	11
Poland	24	382	5	6	29	388
Portugal	28	73	12	121	40	194
Romania	0	0	0	0	0	0
USSR	0	0	1	4	1	4
Yugoslavia	27	162	0	0	27	162
Oth Europe	3	34	4	110	7	144
TOTAL	7035	43284	426	14438	7461	57722
NORTH AND CENTRAL AMERICA						
Barbados	0	0	0	0	0	0
Dominican Rep	0	0	0	0	0	0
Mexico	1	2	56	122	57	124
Oth N & C Am.	0	0	0	0	0	0
TOTAL	273	1356	411	3886	684	5242
SOUTH AMERICA						
Argentina	0	0	0	0	0	0
Chile	0	0	0	0	0	0
Colombia	0	0	0	0	0	0
Paraguay	0	0	0	0	0	0
Peru	0	0	0	0	0	0
Uruguay	0	0	0	0	0	0
Venezuela	0	0	0	0	0	0
Oth South Am.	0	0	0	0	0	0
TOTAL	109	1021	4	2	113	1024
OCEANIA						
Australia	4	79	4	87	8	166
New Zealand	0	0	0	0	0	0
Oth Oceania	0	0	0	0	0	0
TOTAL	4	79	4	87	8	166

U.S. IMPORTS
Metal Cutting and Metal Forming Machine Tool Totals
November 89

	METAL CUTTING		METAL FORMING		TOTAL	
	UNITS	$000	UNITS	$000	UNITS	$000
ASIA						
China	14664	2021	607	25	15271	2046
Hong Kong	1	9	2	6	3	15
India	4	36	0	0	4	36
Indonesia	0	0	0	0	0	0
Iran	0	0	0	0	0	0
Iraq	0	0	0	0	0	0
Israel	4	251	4	56	8	307
Malaysia	0	0	0	0	0	0
Pakistan	0	0	0	0	0	0
Philippines	0	0	0	0	0	0
Thailand	0	0	0	0	0	0
Oth Asia	0	0	0	0	0	0
TOTAL	61590	83769	1868	23008	63458	106777
AFRICA						
Ghana	0	0	0	0	0	0
Kenya	0	0	0	0	0	0
Niger	0	0	0	0	0	0
South Africa	1	36	1	27	2	63
Swaziland	0	0	0	0	0	0
Oth Africa	0	0	0	0	0	0
TOTAL	1	36	1	27	2	63

Note: Region totals include top countries detailed by product as well as countries listed above.

Cutting Section Notes:
Total for Metal Cutting and Metal Forming appears in Metal Forming Section.
Product Code 9000000001, Metal cutting machine tools, n.e.c., represents the total of codes: 8461900040 and 8461900080.
n.e.c. - Not elsewhere classified.

U.S. EXPORTS
Metal Cutting Machine Tools - November 89

RELEASED: January 31, 1990

		TOTAL YTD		TOTAL MO.	
		UNITS	$000	UNITS	$000
8456300000	Electro-discharge machines	336	4651	7	316
8457100015	Vert. mach. ctrs., ATC, Y-axis travel not over 660mm(26")	30	4765	7	1132
100025	Vert. mach. ctrs., ATC, Y-axis travel over 660mm(26")	8	1256	0	0
100035	Horiz. mach. ctrs., ATC	43	18132	2	1552
100045	Mach. ctrs., n.e.c.	262	17841	27	2450
200010	Unit construction mach. (single station transfer), NC	3	2683	0	0
200090	Unit construction mach. (single station transfer), non-NC	8	4445	1	178
300010	Multi-station transfer machines, NC	8	12731	1	2443
300090	Multi-station transfer machines, non-NC	17	3518	1	118
8458110010	Horiz. lathes, multiple spindle, NC	3	534	0	0
110030	Horiz. lathes, power rating under 18.65 kW (25 HP), NC	173	14425	15	1297
110050	Horiz. lathes, power rating 18.65-37.3 kW (25-50 HP), NC	48	8696	5	744
110090	Horiz. lathes, power rating over 37.3 kW (50 HP), NC	8	1767	0	0
190030	Horiz. engine or toolroom lathes, non-NC	87	1986	4	63
190050	Automatic bar and/or chucking mach., single spindle, non-NC	19	104	1	15
190070	Automatic bar and/or chucking mach., mult. spindle, non-NC	39	2762	0	0
190090	Horiz. lathes, n.e.c., non-NC	245	3320	38	477
911060	Vertical turret lathes, multiple spindle, NC	0	0	0	0
911080	Vertical turret lathes, n.e.c., NC	5	863	0	0
915050	Vertical lathes, excl. VTL's, mult. spindle, NC	2	539	0	0
915070	Vertical lathes, excl. VTL's, n.e.c., NC	11	1148	1	155
991050	Vertical turret lathes, non-NC	20	650	0	0
995090	Vertical lathes, n.e.c., excl. VTL's, non-NC	61	3206	2	94
8459100000	Way-type unit head machines	17	3318	0	0
210080	Other drilling machines, NC	98	7366	3	198
290040	Drilling machines, multiple spindle, non-NC	20	1143	1	23
290050	Drilling machines, radial, non-NC	25	963	0	0
290070	Drilling, upright, ex. sensitive, turret & deep hole, non-NC	68	953	0	0
290090	Drilling machines, n.e.c., non-NC	480	5773	60	388
310010	Boring-milling mach., horiz. spind., table, excl. planer, NC	5	1799	0	0
310040	Boring-milling mach., horiz. spindle, n.e.c., NC	3	642	0	0
310070	Boring-milling mach., n.e.c., NC	32	2437	3	107
390040	Boring-milling mach., horiz. spindle, n.e.c., non-NC	3	247	2	217
390050	Boring-milling mach., excl. horiz. spindle, n.e.c., non-NC	103	2100	3	88
400040	Boring machines, vertical, NC	4	1294	0	0
400050	Boring machines, vertical, non-NC	39	1139	7	100
400070	Boring machines, n.e.c., NC	1	1350	0	0
400080	Boring machines, n.e.c., non-NC	53	3318	13	799
510080	Milling machines, knee type, NC	25	1699	0	0
590030	Milling machines, knee type, non-NC	49	2185	4	88
610080	Milling machines, excl. knee type, n.e.c., NC	49	7738	2	100
690050	Milling machines, profile, dup., or die sinking, non-NC	22	1141	1	46
690070	Milling machines, bed type, non-NC	55	7023	0	0
690090	Milling machines, n.e.c., non-NC	299	6622	4	100
700020	Threading or tapping machines, n.e.c., NC	29	1211	0	0
700080	Threading or tapping machines, n.e.c., non-NC	263	6443	12	226
8460110080	Flat surface grinding mach., NC	137	11052	8	920
190010	Flat surface grinding mach., recip.-table type, non-NC	125	1678	0	0
190050	Flat surface grinding mach., n.e.c., non-NC	97	8635	1	85
210080	Grinding mach., of an accuracy at least 0.01mm, n.e.c., NC	315	24950	3	1046
290010	Grinding mach., external cylindrical, (incl. univ.), non-NC	42	4640	2	85
290030	Grinding mach., internal cylindrical, non-NC	56	4598	3	119
290050	Grinding mach., of accuracy at least 0.01mm, n.e.c., non-NC	433	19890	5	314
310080	Sharpening machines (tool & cutter grinding), NC	42	5203	3	534
390050	Sharpening machines (tool & cutter grinding), non-NC	1021	10038	101	669
400060	Honing or lapping machines, NC	2	58	0	0
400080	Honing or lapping machines, non-NC	714	8880	53	666
900060	Grinding, honing, polishing, & lapping mach., n.e.c., NC	33	3604	1	30
900080	Grinding, honing, polishing, & lapping mach., n.e.c., non-NC	558	12964	62	1305
8461100060	Planing machines, NC	6	3712	0	0
100080	Planing machines, non-NC	169	5949	19	481
200010	Shaping or slotting machines, NC	0	0	0	0
200090	Shaping or slotting machines, non-NC	41	1175	2	7
300060	Broaching machines, NC	3	352	0	0
300080	Broaching machines, non-NC	53	2364	3	62
401050	Gear hobbers	62	5786	29	1059
401070	Gear shapers	66	5522	2	69
401090	Gear cutting machines, n.e.c.	71	18059	8	3443
405060	Gear grinding or finishing machines	57	8974	9	411
500050	Sawing or cutting-off machines, NC	37	1907	5	160
500090	Sawing or cutting-off machines, non-NC	960	12744	85	964
9000000001	Metal cutting machine tools, n.e.c.	321	12300	45	801
9800000001	Used or rebuilt machine tools	5626	48844	280	3937
9900000001	Machine tools valued at less than $2,500	38507	13912	2755	1355
	Cutting Total			3711	32038
	Y-T-D Cutting Total	52732	435718		
	NC Y-T-D Cutting Total*	1501	167692		

Please see notes on last page of the metal forming section.

U.S. EXPORTS
Metal Cutting Machine Tools - November 89

	Australia		Austria		Belgium		Brazil		Canada	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456300000	0	0	0	0	0	0	0	0	1	49
8457100015	0	0	0	0	0	0	0	0	5	730
100025	0	0	0	0	0	0	0	0	0	0
100035	0	0	0	0	0	0	0	0	2	1552
100045	0	0	0	0	4	432	0	0	1	68
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300010	0	0	0	0	0	0	0	0	0	0
300090	0	0	0	0	0	0	0	0	0	0
8458110010	0	0	0	0	0	0	0	0	0	0
110030	0	0	0	0	0	0	1	114	3	283
110050	0	0	0	0	0	0	2	442	3	303
110090	0	0	0	0	0	0	0	0	0	0
190030	0	0	0	0	0	0	0	0	3	59
190050	0	0	0	0	0	0	0	0	0	0
190070	0	0	0	0	0	0	0	0	0	0
190090	0	0	0	0	0	0	0	0	0	0
911060	0	0	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	0	0	0	0
915050	0	0	0	0	0	0	0	0	0	0
915070	0	0	0	0	0	0	0	0	0	0
991050	0	0	0	0	0	0	0	0	0	0
995090	0	0	0	0	0	0	0	0	1	67
8459100000	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	1	23
290050	0	0	0	0	0	0	0	0	0	0
290070	0	0	0	0	0	0	0	0	0	0
290090	0	0	0	0	0	0	0	0	52	329
310010	0	0	0	0	0	0	0	0	0	0
310040	0	0	0	0	0	0	0	0	0	0
310070	0	0	0	0	0	0	0	0	0	0
390040	0	0	0	0	0	0	0	0	2	217
390050	0	0	0	0	0	0	0	0	1	35
400040	0	0	0	0	0	0	0	0	0	0
400050	0	0	0	0	0	0	0	0	1	10
400070	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	0	0	2	300	1	47
510080	0	0	0	0	0	0	0	0	0	0
590030	0	0	0	0	0	0	0	0	0	0
610080	0	0	0	0	0	0	0	0	0	0
690050	0	0	0	0	0	0	0	0	0	0
690070	0	0	0	0	0	0	0	0	0	0
690090	0	0	0	0	0	0	0	0	2	60
700020	0	0	0	0	0	0	0	0	0	0
700080	0	0	0	0	1	92	0	0	3	70
8460110080	0	0	0	0	0	0	0	0	1	380
190010	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	1	85
210080	1	365	0	0	0	0	0	0	0	0
290010	0	0	0	0	0	0	0	0	1	58
290030	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	0	0	1	17	0	0
310080	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	6	53
400060	0	0	0	0	0	0	0	0	0	0
400080	4	70	0	0	2	36	0	0	1	7
900060	0	0	0	0	0	0	0	0	1	30
900080	1	14	0	0	0	0	0	0	7	737
8461100060	0	0	0	0	0	0	0	0	0	0
100080	0	0	0	0	0	0	10	250	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	2	7	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	0	0	3	62
401050	0	0	0	0	0	0	0	0	0	0
401070	0	0	0	0	0	0	0	0	0	0
401090	0	0	0	0	0	0	0	0	0	0
405060	0	0	0	0	0	0	0	0	0	0
500050	0	0	0	0	0	0	0	0	4	78
500090	6	21	0	0	0	0	0	0	21	230
9000000001	3	269	0	0	0	0	3	36	10	69
9800000001	7	219	0	0	0	0	0	0	31	427
9900000001	7	4	0	0	0	0	6	4	982	171
Month Tot	31	968	0	0	7	559	25	1162	1151	6291
Y-T-D Tot	778	9600	58	1253	190	6848	545	10294	23451	61442
MC YTD Tot*	14	1629	5	646	40	4467	47	4081	212	23853

Please see notes on last page of the metal forming section.

U.S. EXPORTS
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	China		France		India		Indonesia		Italy	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456300000	0	0	0	0	0	0	0	0	0	0
8457100015	0	0	0	0	1	290	0	0	0	0
100025	0	0	0	0	0	0	0	0	0	0
100035	0	0	0	0	0	0	0	0	0	0
100045	1	211	0	0	0	0	0	0	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300010	0	0	0	0	0	0	0	0	0	0
300090	0	0	0	0	0	0	0	0	0	0
8458110010	0	0	0	0	0	0	0	0	0	0
110030	0	0	1	52	0	0	0	0	0	0
110050	0	0	0	0	0	0	0	0	0	0
110090	0	0	0	0	0	0	0	0	0	0
190030	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
190070	0	0	0	0	0	0	0	0	0	0
190090	0	0	0	0	0	0	0	0	0	0
911060	0	0	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	0	0	0	0
915050	0	0	0	0	0	0	0	0	0	0
915070	1	155	0	0	0	0	0	0	0	0
991050	0	0	0	0	0	0	0	0	0	0
995090	0	0	0	0	0	0	0	0	0	0
8459100000	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	0	0	0	0	0	0
290070	0	0	0	0	0	0	0	0	0	0
290090	0	0	0	0	0	0	0	0	2	22
310010	0	0	0	0	0	0	0	0	0	0
310040	0	0	0	0	0	0	0	0	0	0
310070	0	0	0	0	0	0	0	0	0	0
390040	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	0	0
400040	0	0	0	0	0	0	0	0	0	0
400050	3	51	0	0	0	0	0	0	0	0
400070	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	0	0	0	0	0	0
510080	0	0	0	0	0	0	0	0	0	0
590030	0	0	1	17	0	0	0	0	0	0
610080	0	0	0	0	0	0	0	0	0	0
690050	0	0	0	0	0	0	0	0	0	0
690070	0	0	0	0	0	0	0	0	0	0
690090	0	0	0	0	0	0	0	0	0	0
700020	0	0	0	0	0	0	0	0	0	0
700080	0	0	0	0	0	0	0	0	0	0
8460110080	1	295	0	0	0	0	0	0	0	0
190010	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
210080	1	348	1	333	0	0	0	0	0	0
290010	0	0	0	0	0	0	0	0	0	0
290030	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	0	0	0	0	0	0
310080	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	0	0
400060	0	0	0	0	0	0	0	0	0	0
400080	1	12	0	0	0	0	0	0	10	91
900060	0	0	0	0	0	0	0	0	0	0
900080	0	0	9	109	0	0	0	0	0	0
8461100060	0	0	0	0	0	0	0	0	0	0
100080	0	0	0	0	0	0	0	0	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	0	0	0	0
401050	0	0	0	0	0	0	0	0	0	0
401070	0	0	0	0	0	0	0	0	0	0
401090	0	0	0	0	0	0	0	0	0	0
405060	0	0	0	0	0	0	1	25	4	235
500050	0	0	0	0	0	0	0	0	0	0
500090	0	0	0	0	0	0	0	0	0	0
9000000001	1	8	0	0	0	0	0	0	0	0
9800000001	0	0	0	0	1	4	0	0	10	1242
9900000001	0	0	0	0	3	5	0	0	0	0
Month Tot	9	1081	12	510	5	300	1	25	26	1589
Y-T-D Tot	565	25032	832	11048	231	10929	102	4155	813	13358
NC YTD Tot*	102	15705	52	7355	7	2010	6	1968	18	1421

Please see notes on last page of the metal forming section.

U.S. EXPORTS
Metal Cutting Machine Tools - November 89

	Japan		Korea		Malaysia		Mexico		Netherlands	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456300000	3	140	0	0	0	0	2	95	0	0
8457100015	0	0	1	111	0	0	0	0	0	0
100025	0	0	0	0	0	0	0	0	0	0
100035	0	0	0	0	0	0	0	0	0	0
100045	0	0	0	0	0	0	3	221	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	1	178	0	0	0	0	0	0	0	0
300010	0	0	0	0	0	0	0	0	0	0
300090	1	118	0	0	0	0	0	0	0	0
8458110010	0	0	0	0	0	0	0	0	0	0
110030	1	104	0	0	0	0	0	0	0	0
110050	0	0	0	0	0	0	0	0	0	0
110090	0	0	0	0	0	0	0	0	0	0
190030	0	0	0	0	0	0	1	4	0	0
190050	0	0	0	0	0	0	1	15	0	0
190070	0	0	0	0	0	0	0	0	0	0
190090	8	100	0	0	0	0	11	182	0	0
911060	0	0	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	0	0	0	0
915050	0	0	0	0	0	0	0	0	0	0
915070	0	0	0	0	0	0	0	0	0	0
991050	0	0	0	0	0	0	0	0	0	0
995090	0	0	0	0	0	0	0	0	0	0
8459100000	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	0	0	0	0	0	0
290070	0	0	0	0	0	0	0	0	0	0
290090	0	0	0	0	0	0	3	19	0	0
310010	0	0	0	0	0	0	0	0	0	0
310040	0	0	0	0	0	0	0	0	0	0
310070	1	42	0	0	0	0	0	0	0	0
390040	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	0	0
400040	0	0	0	0	0	0	0	0	0	0
400050	0	0	0	0	0	0	3	40	0	0
400070	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	0	0	0	0	0	0
510080	0	0	0	0	0	0	0	0	0	0
590030	0	0	0	0	0	0	0	0	0	0
610080	0	0	0	0	0	0	0	0	2	100
690050	0	0	0	0	0	0	0	0	0	0
690070	0	0	0	0	0	0	0	0	0	0
690090	0	0	0	0	0	0	1	5	0	0
700020	0	0	0	0	0	0	0	0	0	0
700080	1	11	0	0	0	0	0	0	0	0
8460110080	0	0	0	0	0	0	2	83	0	0
190010	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290010	0	0	0	0	0	0	0	0	0	0
290030	1	66	0	0	0	0	2	53	0	0
290050	1	196	0	0	0	0	2	20	0	0
310080	0	0	0	0	0	0	0	0	0	0
390050	6	37	18	116	0	0	3	12	0	0
400060	0	0	0	0	0	0	0	0	0	0
400080	2	42	2	22	0	0	1	21	8	107
900060	0	0	0	0	0	0	0	0	0	0
900080	1	9	1	11	0	0	3	27	0	0
8461100060	0	0	0	0	0	0	0	0	0	0
100080	1	31	0	0	0	0	6	65	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	0	0	0	0
401050	0	0	0	0	0	0	0	0	0	0
401070	0	0	0	0	0	0	0	0	0	0
401090	0	0	0	0	0	0	0	0	0	0
405060	0	0	1	51	0	0	0	0	0	0
500050	0	0	0	0	0	0	0	0	0	0
500090	5	421	2	34	0	0	5	27	8	63
9000000001	9	222	8	89	0	0	4	49	0	0
9800000001	0	0	5	178	0	0	153	907	16	40
9900000001	332	209	5	5	0	0	675	429	0	0
Month Tot	394	1928	43	618	0	0	881	2274	34	310
Y-T-D Tot	3285	28328	1588	35176	101	990	7133	57301	445	3869
NC YTD Tot*	142	9065	138	13583	3	135	166	12398	21	2000

Please see notes on last page of the metal forming section.

U.S. EXPORTS
Metal Cutting Machine Tools - November 89

	Singapore		Spain		Switzerland		Taiwan		Thailand	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456300000	0	0	0	0	0	0	0	0	0	0
8457100015	0	0	0	0	0	0	0	0	0	0
100025	0	0	0	0	0	0	0	0	0	0
100035	0	0	0	0	0	0	0	0	0	0
100045	0	0	0	0	0	0	11	748	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300010	0	0	0	0	0	0	0	0	0	0
300090	0	0	0	0	0	0	0	0	0	0
8458110010	0	0	0	0	0	0	0	0	0	0
110030	0	0	0	0	0	0	0	0	0	0
110050	0	0	0	0	0	0	0	0	0	0
110090	0	0	0	0	0	0	0	0	0	0
190030	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
190070	0	0	0	0	0	0	0	0	0	0
190090	0	0	0	0	0	0	0	0	0	0
911060	0	0	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	0	0	0	0
915050	0	0	0	0	0	0	0	0	0	0
915070	0	0	0	0	0	0	0	0	0	0
991050	0	0	0	0	0	0	0	0	0	0
995090	0	0	0	0	0	0	0	0	0	0
8459100000	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	0	0	0	0	0	0
290070	0	0	0	0	0	0	0	0	0	0
290090	0	0	0	0	2	11	0	0	0	0
310010	0	0	0	0	0	0	0	0	0	0
310040	0	0	0	0	0	0	0	0	0	0
310070	0	0	0	0	1	36	0	0	0	0
390040	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	0	0
400040	0	0	0	0	0	0	0	0	0	0
400050	0	0	0	0	0	0	0	0	0	0
400070	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	0	0	0	0	0	0
510080	0	0	0	0	0	0	0	0	0	0
590030	0	0	0	0	0	0	0	0	0	0
610080	0	0	0	0	0	0	0	0	0	0
690050	0	0	0	0	0	0	0	0	0	0
690070	0	0	0	0	0	0	0	0	0	0
690090	0	0	0	0	0	0	1	35	0	0
700020	0	0	0	0	0	0	0	0	0	0
700080	0	0	0	0	0	0	2	15	0	0
8460110080	0	0	0	0	0	0	1	35	0	0
190010	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290010	0	0	0	0	0	0	0	0	0	0
290030	0	0	0	0	0	0	0	0	0	0
290050	0	0	1	82	0	0	0	0	0	0
310080	0	0	0	0	0	0	0	0	0	0
390050	15	100	0	0	1	12	0	0	0	0
400060	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	0	0	2	25	2	17
900060	0	0	0	0	0	0	0	0	0	0
900080	4	36	2	22	8	84	2	35	5	25
8461100060	0	0	0	0	0	0	0	0	0	0
100080	0	0	0	0	0	0	0	0	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	0	0	0	0
401050	1	85	0	0	0	0	0	0	0	0
401070	0	0	0	0	0	0	0	0	0	0
401090	0	0	0	0	0	0	0	0	0	0
405060	0	0	0	0	1	9	2	93	0	0
500050	0	0	0	0	0	0	1	81	0	0
500090	0	0	0	0	0	0	3	35	0	0
9000000001	2	16	0	0	0	0	3	13	0	0
9800000001	1	190	3	4	3	13	0	0	0	0
9900000001	15	11	4	3	17	10	0	0	7	11
Month Tot	38	439	10	110	33	175	28	1116	14	53
Y-T-D Tot	806	7620	235	3107	288	3514	624	8836	108	2196
NC YTD Tot*	34	2396	3	841	17	1649	48	3470	19	793

Please see notes on last page of the metal forming section.

U.S. EXPORTS
Metal Cutting Machine Tools - November 89

	U.K.		USSR		Venezuela		West Germany		All Other	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8456300000	0	0	0	0	0	0	0	0	1	32
8457100015	0	0	0	0	0	0	0	0	0	0
100025	0	0	0	0	0	0	0	0	0	0
100035	0	0	0	0	0	0	0	0	0	0
100045	5	320	0	0	0	0	0	0	2	450
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300010	1	2443	0	0	0	0	0	0	0	0
300090	0	0	0	0	0	0	0	0	0	0
8458110010	0	0	0	0	0	0	0	0	0	0
110030	7	508	0	0	0	0	0	0	2	237
110050	0	0	0	0	0	0	0	0	0	0
110090	0	0	0	0	0	0	0	0	0	0
190030	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
190070	0	0	0	0	0	0	0	0	0	0
190090	2	18	0	0	0	0	0	0	17	177
911060	0	0	0	0	0	0	0	0	0	0
911080	0	0	0	0	0	0	0	0	0	0
915050	0	0	0	0	0	0	0	0	0	0
915070	0	0	0	0	0	0	0	0	0	0
991050	0	0	0	0	0	0	0	0	0	0
995090	1	28	0	0	0	0	0	0	0	0
8459100000	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	3	198
290040	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	0	0	0	0	0	0
290070	0	0	0	0	0	0	0	0	0	0
290090	0	0	0	0	0	0	0	0	1	6
310010	0	0	0	0	0	0	0	0	0	0
310040	0	0	0	0	0	0	0	0	0	0
310070	0	0	0	0	0	0	0	0	1	29
390040	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	2	53	0	0	0	0
400040	0	0	0	0	0	0	0	0	0	0
400050	0	0	0	0	0	0	0	0	0	0
400070	0	0	0	0	0	0	0	0	0	0
400080	0	0	0	0	0	0	0	0	10	452
510080	0	0	0	0	0	0	0	0	0	0
590030	2	32	0	0	0	0	1	32	0	0
610080	0	0	0	0	0	0	0	0	0	0
690050	1	46	0	0	0	0	0	0	0	0
690070	0	0	0	0	0	0	0	0	0	0
690090	0	0	0	0	0	0	0	0	0	0
700020	0	0	0	0	0	0	0	0	0	0
700080	0	0	0	0	0	0	0	0	5	38
8460110080	0	0	0	0	0	0	0	0	3	126
190010	0	0	0	0	0	0	0	0	0	0
190050	0	0	0	0	0	0	0	0	0	0
210080	0	0	0	0	0	0	0	0	0	0
290010	1	27	0	0	0	0	0	0	0	0
290030	0	0	0	0	0	0	0	0	0	0
290050	0	0	0	0	0	0	0	0	0	0
310080	0	0	0	0	0	0	3	534	0	0
390050	0	0	41	267	0	0	6	37	5	32
400060	0	0	0	0	0	0	0	0	0	0
400080	1	5	12	189	0	0	2	7	3	16
900060	0	0	0	0	0	0	0	0	0	0
900080	2	12	0	0	0	0	7	90	10	94
8461100060	0	0	0	0	0	0	0	0	0	0
100080	0	0	0	0	0	0	2	135	0	0
200010	0	0	0	0	0	0	0	0	0	0
200090	0	0	0	0	0	0	0	0	0	0
300060	0	0	0	0	0	0	0	0	0	0
300080	0	0	0	0	0	0	0	0	0	0
401050	0	0	0	0	0	0	28	974	0	0
401070	0	0	0	0	0	0	0	0	2	69
401090	1	60	2	2496	0	0	4	750	1	137
405060	0	0	0	0	0	0	0	0	0	0
500050	0	0	0	0	0	0	0	0	0	0
500090	11	102	0	0	0	0	0	0	4	31
9000000001	0	0	0	0	0	0	0	0	2	29
9800000001	9	250	0	0	2	19	12	66	27	378
9900000001	233	61	0	0	9	6	31	20	429	406
Month Tot	277	3917	55	2952	13	78	96	2645	528	2937
Y-T-D Tot	2666	52736	89	11928	302	5487	1722	28410	5775	32259
NC YTD Tot*	176	33623	22	3238	10	701	73	10083	126	10580

Please see notes on last page of the metal forming section.

U.S. EXPORTS
Metal Forming Machine Tools, Machine Tool Totals and Other Manufacturing Technology
November 89

RELEASED: January 31, 1990

Metal Forming Machine Tools		TOTAL YTD		TOTAL MO.	
		UNITS	$000	UNITS	$000
8454300010	Die casting machines	515	8165	60	1073
8462100030	Headers and upsetters, including cold headers	111	18691	45	4945
100050	Forging or die stamping machines, and hammers, n.e.c.	654	18990	65	1576
210080	Bending, folding, straight. or flat. mach., incl presses, NC	300	20391	8	383
290030	Press brakes, non-NC	31	1267	1	8
290040	Bending rolls, non-NC	53	1595	1	16
290050	Bending, folding, straight., or flat., n.e.c., non-NC	569	21118	70	1917
310080	Shearing machines, NC	54	3966	4	167
390050	Shearing machines, non-NC	243	4363	78	833
410080	Punching or notching mach., incl. comb. punch & shear, NC	144	22268	12	1261
490050	Punching or notching mach., incl. comb. punch & sh., non-NC	698	21680	47	1491
910060	Hydraulic presses, NC	83	4765	6	451
910090	Hydraulic presses, non-NC	547	22776	56	800
990030	Presses, n.e.c., NC	54	6386	3	236
990040	Presses, mechanical, non-NC	163	9870	21	1150
990060	Presses, n.e.c., non-NC	591	31768	72	4426
8463100080	Draw benches for bars, tubes, profiles, wire or the like	250	6241	20	1087
3200080	Thread rolling machines	39	2779	6	189
3300080	Machines for working wire	864	29620	69	1684
3900080	Metal forming machine tools, n.e.c.	1925	97402	83	8810
9800000002	Used or rebuilt machine tools	3115	61433	213	3557
9900000002	Machine tools valued at less than $2,500	5496	4068	395	251
	Forming Total			1335	36310
	Y-T-D Forming Total	16499	419602		
	NC Y-T-D Forming Total	635	57776		
	Cutting and Forming Totals:				
	Monthly Total			5046	68348
	Y-T-D Total	69231	855320		
	NC Y-T-D Total*	2136	225468		

Other Manufacturing Technology		TOTAL YTD		TOTAL MO.	
		UNITS	$000	UNITS	$000
1000000000	Machine tool parts and accessories	0	657753	0	58915
2710003070	Quenching or cutting oils	0	11614	0	1469
8428900010	Industrial robots for lifting, handling, loading or unload	771	10667	26	197
8456100000	Laser, light or photon beam for working any material	2216	40419	84	2598
200000	Ultrasonic process for working any material	90	760	0	0
8477106010	Injection molding mach., for rubber or oth. thermosetting	217	20551	31	2767
106050	Injection molding mach., for thermoplastics	372	41364	23	2872
200010	Extruders for rubber or other thermosetting materials	251	10460	7	243
200050	Extruders for processing thermoplastics	870	33716	59	1325
300000	Blow molding machines	461	26506	56	1073
400000	Vacuum-molding and other thermoforming machines	1528	14768	25	423
8479899040	Industrial robots, n.e.c.	2239	30119	190	1839
900040	Industrial robot parts	0	13139	0	2024
8537100030	Numerical controls for controlling machine tools	8917	37747	186	2852
9024100000	Machines and appliances for testing metals	0	68700	0	5914
9031100000	Machines for balancing mechanical parts	0	20041	0	971
300000	Profile projectors	0	7342	0	540
9032810040	Industrial process control inst., hydraulic or pneumatic	659465	42515	92296	4309

Note: Product code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466940000.
* "NC Y-T-D Total" does not include code 8456300000.
Note: "0" in units column with corresponding value means that unit measure is not meaningful.
n.e.c. - Not elsewhere classified.

U.S. EXPORTS
Metal Forming Machine Tools, Machine Tool Totals and Other Manufacturing Technology
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Metal Forming

	Australia		Austria		Belgium		Brazil		Canada	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	10	111	0	0	0	0	0	0	9	778
8462100030	0	0	0	0	0	0	0	0	0	0
100050	0	0	0	0	0	0	0	0	10	208
210080	0	0	0	0	0	0	0	0	0	0
290030	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	5	25	0	0	0	0	0	0	30	664
310080	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	3	89
410080	0	0	0	0	0	0	0	0	8	801
490050	6	70	1	127	0	0	0	0	13	113
910060	0	0	0	0	0	0	1	32	0	0
910090	4	43	0	0	0	0	0	0	4	79
990030	0	0	0	0	0	0	0	0	0	0
990040	0	0	0	0	0	0	8	385	7	400
990060	1	19	0	0	0	0	0	0	7	145
8463100080	1	34	0	0	0	0	0	0	0	0
200080	0	0	0	0	0	0	0	0	1	25
300080	0	0	1	6	0	0	30	752	1	34
900080	2	203	0	0	0	0	0	0	9	65
9800000002	5	20	0	0	3	399	29	97	11	75
9900000002	14	5	0	0	0	0	0	0	141	98
Month Tot	48	530	2	134	3	399	68	1265	254	3572
Y-T-D Tot	548	6821	109	815	138	2788	181	7803	2738	40131
NC YTD Tot	27	1357	0	0	0	0	11	732	138	13453
C&F Month	79	1498	2	134	10	958	93	2428	1405	9863
C&F Y-T-D	1326	16421	167	2069	328	9636	726	18097	26189	101573
C&F NC YTD*	41	2985	5	646	40	4467	58	4814	350	37307

Other Manufacturing Technology

1000000000	0	1234	0	155	0	422	0	821	0	6604
2710003070	0	15	0	0	0	0	0	0	0	114
8428900010	0	0	0	0	0	0	0	0	2	68
8456100000	1	13	0	0	0	0	0	0	2	95
200000	0	0	0	0	0	0	0	0	0	0
8477106010	0	0	0	0	0	0	0	0	2	119
106050	0	0	2	143	0	0	0	0	1	190
200010	0	0	0	0	0	0	0	0	1	56
200050	4	108	0	0	0	0	0	0	15	479
300000	0	0	0	0	0	0	0	0	3	49
400000	0	0	0	0	0	0	0	0	16	256
8479899040	1	98	0	0	0	0	0	0	6	379
8479900040	0	0	0	8	0	0	0	0	0	99
8537100030	1	13	1	13	2	23	0	0	23	342
9024100000	0	80	0	0	0	66	0	161	0	380
9031100000	0	26	0	0	0	0	0	0	0	342
300000	0	0	0	0	0	0	0	0	0	38
9032810040	615	47	511	26	1852	95	2010	103	13414	415

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466940000.
* "C&F NC YTD" does not include code 8456300000.
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Metal Forming

	China		France		India		Indonesia		Italy	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	0	0	4	25	4	42	0	0	0	0
8462100030	0	0	0	0	0	0	0	0	0	0
100050	0	0	0	0	10	112	0	0	0	0
210080	0	0	0	0	0	0	1	67	0	0
290030	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	0	0	7	226	0	0	0	0	0	0
310080	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	0	0
410080	0	0	0	0	0	0	0	0	0	0
490050	1	12	0	0	0	0	0	0	0	0
910060	0	0	1	285	0	0	0	0	0	0
910090	0	0	1	11	2	24	0	0	0	0
990030	1	109	0	0	0	0	0	0	0	0
990040	0	0	0	0	0	0	0	0	0	0
990060	0	0	0	0	1	15	0	0	7	319
8463100080	0	0	1	13	0	0	0	0	0	0
200080	0	0	0	0	1	32	0	0	0	0
300080	0	0	2	36	1	13	0	0	2	62
900080	1	750	6	166	0	0	0	0	1	8
9800000002	0	0	2	31	0	0	0	0	1	6
9900000002	0	0	4	3	0	0	0	0	15	10
Month Tot	3	870	28	796	19	237	1	67	26	406
Y-T-D Tot	245	10963	415	8244	130	8834	29	234	219	7624
NC YTD Tot	23	977	6	691	4	1067	2	82	6	2782
C&F Month	12	1951	40	1306	24	537	2	92	52	1995
C&F Y-T-D	810	35995	1247	19291	361	19763	131	4389	1032	20982
C&F NC YTD*	125	16682	58	8046	11	3077	8	2050	24	4202

Other Manufacturing Technology

1000000000	0	6335	0	1238	0	515	0	30	0	1984
2710003070	0	0	0	5	0	8	0	100	0	5
8428900010	0	0	4	42	0	0	0	0	0	0
8456100000	0	0	2	33	0	0	1	33	2	59
200000	0	0	0	0	0	0	0	0	0	0
8477106010	0	0	0	0	0	0	0	0	0	0
106050	0	0	0	0	0	0	0	0	0	0
200010	0	0	0	0	0	0	0	0	0	0
200050	0	0	0	0	0	0	0	0	0	0
300000	1	45	0	0	0	0	0	0	0	0
400000	0	0	0	0	0	0	0	0	0	0
8479899040	0	0	0	0	0	0	0	0	21	152
900040	0	0	0	48	0	0	0	0	0	12
8537100030	0	0	22	324	0	0	0	0	3	35
9024100000	0	212	0	83	0	392	0	0	0	51
9031100000	0	0	0	116	0	0	0	0	0	10
300000	0	21	0	0	0	0	0	0	0	71
9032810040	129	62	2434	132	50	8	0	0	6341	392

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466940000.
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Metal Forming

	Japan		Korea		Malaysia		Mexico		Netherlands	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	0	0	0	0	0	0	2	25	0	0
8462100030	11	1527	28	1475	0	0	0	0	0	0
100050	4	65	13	512	0	0	7	102	0	0
210080	0	0	1	31	0	0	3	150	0	0
290030	0	0	0	0	0	0	1	8	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	4	67	6	618	0	0	5	84	0	0
310080	0	0	0	0	0	0	4	167	0	0
390050	0	0	55	360	0	0	4	46	5	74
410080	0	0	0	0	0	0	1	99	0	0
490050	3	137	0	0	0	0	6	257	0	0
910060	2	78	0	0	0	0	0	0	0	0
910090	2	94	2	30	0	0	36	469	1	10
990030	1	6	0	0	0	0	0	0	0	0
990040	0	0	0	0	0	0	0	0	0	0
990060	9	201	16	456	0	0	15	1740	0	0
8463100080	0	0	0	0	0	0	9	128	0	0
200080	0	0	0	0	0	0	1	18	0	0
300080	0	0	0	0	0	0	6	108	0	0
900080	5	547	3	3533	2	43	13	82	1	14
9800000002	1	15	1	795	0	0	70	603	2	22
9900000002	0	0	0	0	0	0	43	36	20	12
Month Tot	42	2736	125	7810	2	43	226	4124	29	131
Y-T-D Tot	904	42568	965	60163	29	1540	3107	39192	395	6381
NC YTD Tot	102	8409	52	4674	7	1011	58	4107	23	2820
C&F Month	436	4664	168	8428	2	43	1107	6399	63	441
C&F Y-T-D	4189	70896	2553	95339	130	2531	10240	96493	840	10251
C&F NC YTD*	244	17475	190	18257	10	1146	224	16505	44	4819

Other Manufacturing Technology

1000000000	0	7991	0	1464	0	336	0	4059	0	296
2710003070	0	55	0	22	0	0	0	442	0	13
8428900010	0	0	0	0	0	0	0	0	0	0
8456100000	22	735	10	232	3	68	0	0	0	0
200000	0	0	0	0	0	0	0	0	0	0
8477106010	2	235	2	436	0	0	22	1766	1	71
106050	0	0	6	454	0	0	4	227	0	0
200010	0	0	0	0	0	0	3	126	0	0
200050	1	8	22	211	0	0	10	228	0	0
300000	0	0	0	0	0	0	5	4	0	0
400000	0	0	0	0	0	0	3	47	0	0
8479899040	5	30	13	76	0	0	0	0	0	0
900040	0	115	0	0	0	0	0	3	0	8
8537100030	1	13	6	81	1	9	0	0	3	82
9024100000	0	1586	0	596	0	30	0	345	0	8
9031100000	0	7	0	15	0	9	0	24	0	5
300000	0	156	0	5	0	0	0	4	0	0
9032810040	1587	140	2207	153	0	0	3516	116	10854	572

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466940000.
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Metal Forming

	Singapore		Spain		Switzerland		Taiwan		Thailand	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	0	0	0	0	0	0	0	0	0	0
8462100030	0	0	0	0	0	0	0	0	0	0
100050	0	0	1	23	0	0	2	36	1	17
210080	0	0	0	0	0	0	0	0	0	0
290030	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	0	0
290050	3	13	0	0	1	20	0	0	1	13
310080	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	0	0
410080	0	0	0	0	0	0	0	0	0	0
490050	2	7	1	52	0	0	1	79	0	0
910060	0	0	0	0	0	0	1	14	0	0
910090	0	0	0	0	0	0	0	0	0	0
990030	0	0	0	0	0	0	0	0	0	0
990040	0	0	0	0	0	0	0	0	0	0
990060	0	0	0	0	1	22	0	0	0	0
8463100080	0	0	2	16	0	0	0	0	0	0
200080	0	0	3	114	0	0	0	0	0	0
300080	1	31	2	79	0	0	3	75	2	50
900080	0	0	0	0	4	15	2	1246	0	0
9800000002	0	0	0	0	5	5	0	0	1	147
9900000002	0	0	0	0	0	0	0	0	0	0
Month Tot	6	52	9	284	11	62	9	1449	5	226
Y-T-D Tot	188	7114	111	4052	58	1399	239	18742	92	3682
NC YTD Tot	15	2546	2	138	8	375	14	2562	6	456
C&F Month	44	491	19	394	44	236	37	2566	19	279
C&F Y-T-D	994	14734	346	7159	346	4912	863	27578	200	5879
C&F NC YTD*	49	4942	5	979	25	2025	62	6032	25	1250

Other Manufacturing Technology

1000000000	0	901	0	757	0	2007	0	2009	0	225
2710003070	0	12	0	10	0	0	0	161	0	8
8428900010	16	43	0	0	0	0	0	0	0	0
8456100000	1	15	1	18	3	90	9	270	0	0
200000	0	0	0	0	0	0	0	0	0	0
8477106010	0	0	0	0	0	0	0	0	0	0
106050	3	333	0	0	0	0	0	0	0	0
200010	0	0	0	0	0	0	0	0	0	0
200050	0	0	0	0	0	0	0	0	0	0
300000	0	0	5	3	0	0	2	26	0	0
400000	1	16	0	0	0	0	0	0	0	0
8479899040	29	179	0	0	3	62	0	0	0	0
900040	0	6	0	0	0	0	0	0	0	0
8537100030	3	44	2	25	0	0	1	8	3	42
9024100000	0	77	0	37	0	9	0	127	0	14
9031100000	0	31	0	6	0	0	0	73	0	0
300000	0	118	0	0	0	0	0	3	0	0
9032810040	1773	109	1010	54	1126	81	9161	477	15890	48

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466940000.
* "C&F NC YTD" does not include code 8456300000.
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Metal Forming

	U.K.		USSR		Venezuela		West Germany		All Other	
	Units	$000	Units	$000	Units	$000	Units	$000	Units	$000
8454300010	0	0	0	0	29	74	1	10	1	8
8462100030	0	0	0	0	0	0	6	1944	0	0
100050	3	254	0	0	4	73	4	52	6	123
210080	0	0	0	0	0	0	0	0	3	135
290030	0	0	0	0	0	0	0	0	0	0
290040	0	0	0	0	0	0	0	0	1	16
290050	0	0	0	0	0	0	1	8	7	176
310080	0	0	0	0	0	0	0	0	0	0
390050	0	0	0	0	0	0	0	0	11	264
410080	2	291	0	0	0	0	0	0	1	71
490050	1	14	0	0	0	0	5	461	7	164
910060	0	0	0	0	0	0	1	43	0	0
910090	0	0	0	0	0	0	1	9	3	32
990030	1	120	0	0	0	0	0	0	0	0
990040	0	0	0	0	0	0	6	365	0	0
990060	6	513	0	0	2	53	4	786	3	157
8463100080	2	10	0	0	0	0	0	0	5	886
200080	0	0	0	0	0	0	0	0	0	0
300080	6	121	0	0	0	0	2	47	10	270
900080	4	1364	0	0	0	0	11	330	19	443
9800000002	7	92	0	0	24	379	4	76	47	797
9900000002	76	39	0	0	0	0	0	0	82	48
Month Tot	108	2817	0	0	59	579	46	4131	206	3590
Y-T-D Tot	1219	38701	6	977	244	8413	851	26327	3339	66092
NC YTD Tot	59	3462	3	176	3	89	9	1025	57	4784
C&F Month	385	6734	55	2952	72	657	142	6776	734	6527
C&F Y-T-D	3885	91437	95	12904	546	13901	2573	54737	9114	98351
C&F NC YTD*	235	37086	25	3415	13	790	82	11108	183	15364

Other Manufacturing Technology

1000000000	0	7950	0	194	0	567	0	3243	0	7577
2710003070	0	0	0	0	0	13	0	5	0	482
8428900010	4	43	0	0	0	0	0	0	0	0
8456100000	8	444	0	0	1	20	3	110	15	363
200000	0	0	0	0	0	0	0	0	0	0
8477106010	0	0	0	0	0	0	2	141	0	0
106050	3	174	0	0	0	0	3	1323	1	28
200010	0	0	0	0	0	0	0	0	3	61
200050	4	88	0	0	0	0	0	0	3	204
300000	0	0	0	0	0	0	1	27	39	919
400000	3	16	0	0	0	0	0	0	2	88
8479899040	3	20	0	0	0	0	101	695	8	150
900040	0	180	0	0	0	0	0	1444	0	100
8537100030	77	1249	0	0	0	0	13	179	24	370
9024100000	0	420	0	19	0	51	0	403	0	767
9031100000	0	31	0	0	0	13	0	39	0	225
300000	0	12	0	0	0	0	0	0	0	113
9032810040	5359	432	493	25	224	17	7455	438	4285	367

Note: Product Code 1000000000 represents aggregated machine tool parts codes 8466100010 through 8466940000.
* "C&F NC YTD" does not include code 8456300000.
Note: "0" in units column with corresponding value means that unit measure is not meaningful.

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	METAL CUTTING		METAL FORMING		TOTAL	
	UNITS	$000	UNITS	$000	UNITS	$000
EUROPE						
Bulgaria	0	0	0	0	0	0
Czechoslovakia	0	0	0	0	0	0
Denmark	0	0	15	11	15	11
East Germany	0	0	0	0	0	0
Finland	2	10	3	86	5	96
Greece	0	0	2	810	2	810
Hungary	0	0	0	0	0	0
Iceland	0	0	0	0	0	0
Ireland	0	0	5	41	5	41
Luxembourg	0	0	0	0	0	0
Norway	0	0	1	73	1	73
Poland	0	0	2	60	2	60
Portugal	0	0	0	0	0	0
Romania	0	0	0	0	0	0
Sweden	9	39	3	178	12	217
Turkey	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0
Oth Europe	1	26	0	0	1	26
TOTAL	562	12842	293	10418	855	23259
NORTH AND CENTRAL AMERICA						
Bahamas	69	45	1	16	70	61
Barbados	0	0	0	0	0	0
Belize	2	13	0	0	2	13
Bermuda	1	8	0	0	1	8
Costa Rica	128	33	0	0	128	33
Dominican Rep	1	32	20	119	21	151
El Salvador	0	0	0	0	0	0
Guatemala	0	0	2	12	2	12
Haiti	0	0	2	25	2	25
Honduras	0	0	2	124	2	124
Jamaica	0	0	1	6	1	6
Panama	0	0	1	141	1	141
Trinidad	0	0	2	38	2	38
Oth N & C Am.	2	65	4	95	6	160
TOTAL	2235	8761	515	8271	2750	17031
SOUTH AMERICA						
Argentina	1	9	0	0	1	9
Bolivia	0	0	0	0	0	0
Chile	3	75	0	0	3	75
Colombia	7	33	1	23	8	56
Ecuador	0	0	0	0	0	0
Paraguay	0	0	0	0	0	0
Peru	2	547	20	565	22	1112
Uruguay	4	30	0	0	4	30
Oth South Am.	0	0	0	0	0	0
TOTAL	55	1934	148	2432	203	4366
OCEANIA						
New Zealand	8	40	10	151	18	191
Oth Oceania	1	6	0	0	1	6
TOTAL	40	1014	58	681	98	1695

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	METAL CUTTING		METAL FORMING		TOTAL	
	UNITS	$000	UNITS	$000	UNITS	$000
ASIA						
Bangladesh	0	0	0	0	0	0
Hong Kong	226	552	76	148	302	700
Iran	0	0	0	0	0	0
Iraq	0	0	0	0	0	0
Israel	4	129	6	174	10	303
Jordan	0	0	0	0	0	0
Kuwait	0	0	0	0	0	0
Laos	0	0	0	0	0	0
Lebanon	0	0	0	0	0	0
Macao	0	0	0	0	0	0
Oman	0	0	0	0	0	0
Pakistan	0	0	2	136	2	136
Philippines	2	214	0	0	2	214
Qatar	1	3	0	0	1	3
Saudi Arabia	34	487	14	349	48	836
Sri Lanka	0	0	0	0	0	0
Syria	0	0	0	0	0	0
United Arab Emr	0	0	6	150	6	150
Vietnam	0	0	0	0	0	0
Oth Asia	0	0	0	0	0	0
TOTAL	799	6945	316	14448	1115	21393
AFRICA						
Algeria	0	0	0	0	0	0
Botswana	0	0	0	0	0	0
Egypt	0	0	0	0	0	0
Ethiopia	0	0	0	0	0	0
Gabon	0	0	0	0	0	0
Ghana	0	0	1	19	1	19
Guinea	0	0	0	0	0	0
Kenya	0	0	0	0	0	0
Malawi	0	0	0	0	0	0
Mauritius	0	0	0	0	0	0
Morocco	0	0	0	0	0	0
Niger	0	0	0	0	0	0
Nigeria	10	452	1	4	11	456
South Africa	9	68	3	37	12	105
Sudan	0	0	0	0	0	0
Swaziland	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0
Zaire	0	0	0	0	0	0
Zambia	0	0	0	0	0	0
Zimbabwe	1	23	0	0	1	23
Oth Africa	0	0	0	0	0	0
TOTAL	20	542	5	61	25	603

Note: Region totals include top countries detailed by product as well as countries listed above.

Cutting Section Notes:
Total for Metal Cutting and Metal Forming appears in Metal Forming Section.
Product Code 9000000001, Metal cutting machine tools, n.e.c., represents the total of codes: 8461900040 and 8461900080.
n.e.c. - Not elsewhere classified.
* "NC Y-T-D Cutting Total" does not include code 8456300000.